U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF EXPERIMENT STATIONS
A. W. HARRIS, DIRECTOR

EXPERIMENT STATION BULLETIN No. 11

# A COMPILATION OF ANALYSES

OF

# AMERICAN FEEDING STUFFS

BY

E. H. JENKINS, Ph. D.
AND
A. L. WINTON, Ph. B.

PUBLISHED BY AUTHORITY OF THE SECRETARY OF AGRICULTURE

WASHINGTON
GOVERNMENT PRINTING OFFICE
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# LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF EXPERIMENT STATIONS,
*Washington, D. C., October 15, 1891.*

SIR: I have the honor to transmit herewith for publication a compilation of results of analyses of American feeding stuffs, which has been prepared by E. H. Jenkins, Ph. D., vice director of the Connecticut Agricultural Experiment Station, and A. L. Winton, Ph. B., chemist. The usefulness of this compilation requires no explanation.

Respectfully,

A. W. HARRIS,
*Director.*

Hon. J. M. RUSK,
*Secretary of Agriculture.*

# ANALYSES OF AMERICAN FEEDING STUFFS.

## INTRODUCTORY NOTE.

The following compilation is intended to include all analyses of American feeding stuffs which were accessible to the compilers at the time the work was done, with the exception of those which were so incomplete or so obviously erroneous as to leave no doubt about the propriety of excluding them.

The compilation was designed to include all analyses which were published before September 1, 1890. It was not possible to do this, as the latest publications of some of the stations were, for various reasons, not accessible when needed. In the following list is given the name of each station and the date or number of the latest issue of report and bulletin examined by the compilers.

| Station. | Report for the year. | Bulletin number. |
|---|---|---|
| Alabama — Canebrake Station | 1888 | 8 |
| Alabama — College Station | 1889 | 17 |
| Arizona | ..... | ..... |
| Arkansas | 1889 | 12 |
| California | 1887 | 87 |
| Colorado | 1889 | 11 |
| Connecticut — State Station, Middletown | All | All |
| Connecticut — State Station, New Haven | 1889 | 105 |
| Connecticut — Storrs Station | 1889 | 5 |
| Delaware | 1889 | 6 |
| Florida | ..... | 10 |
| Georgia | 1889 | 8 |
| Illinois | 1889 | 11 |
| Indiana | 1888 | 32 |
| Iowa | 1888 | 10 |
| Kansas | 1888 | 11 |
| Kentucky | ..... | 30 |
| Louisiana — Sugar Station | 1889 | 28 |
| Louisiana — State Station | 1889 | 26 |
| Louisiana — North Louisiana Station | 1889 | 27 |
| Maine | 1889*a* | 26 |
| Maryland | 1888 | 10 |
| Massachusetts — State Station | 1889 | 37 |
| Massachusetts — Hatch Station | 1889 | 9 |
| Michigan | 1889 | 6 |
| Minnesota | 1888 | 12 |
| Mississippi | 1889 | 12 |
| Missouri | ..... | 12 |
| Nebraska | 1890 | 15 |
| Nevada | 1888 | 11 |
| New Hampshire | 1888 | 10 |
| New Jersey | 1888 | 71 |
| New Mexico | ..... | 1 |
| New York — State Station | 1888 | 23 |
| New York — Cornell Station | 1889 | 19 |
| North Carolina | 1889 | 72 |
| North Dakota | 1888 | 18 |

*a* Part I.

| Station. | Report for the year. | Bulletin number. |
|---|---|---|
| Ohio | 1887 | 6† |
| Oregon | 1889 | 5 |
| Pennsylvania | 1888 | 11 |
| Rhode Island | 1890 | ..... |
| South Carolina | 1888 | 7 |
| South Dakota | ..... | ..... |
| Tennessee | 1888 | a3 |
| Texas | 1889 | 11 |
| Utah | ..... | 1 |
| Vermont | 1888 | 20 |
| Virginia | ..... | ..... |
| West Virginia | 1889 | 6 |
| Wisconsin | 1889 | 24 |

a Vol. III.

The compilers have also examined all transactions of agricultural societies and reports of state boards of agriculture issued prior to the establishment of experiment stations in the respective States, which were accessible in the Yale University library, as well as the files of the American chemical journals. The bulletins of the Division of Chemistry of the U. S. Department of Agriculture, the reports of the U. S. Department of Agriculture, and the bulletins and reports of the Ontario Agricultural College, and the Central Experiment Station at Ottawa, Canada, have likewise been searched for analyses of feeding stuffs.

Each analysis is designated by number to facilitate cross-reference. The sum of all ingredients as given in a considerable number of analyses was found to be more or less than 100 per cent. If the difference was less than half a per cent this difference has been added to or subtracted from the nitrogen-free extract; if more than half a per cent the analysis has been inserted in the table uncorrected, but with a footnote calling attention to it, and has been excluded from the average.

It has been our aim to limit ourselves quite strictly to mere compilation, thus presenting in the most accessible shape a complete record of the work which has been done in this country in the line of proximate analysis of feeding stuffs, with a reference in every case to the original publication.

It is probable that there was greater divergence in the methods of analysis in this country in former years than there is at present, although it is within our knowledge that analyses made at the Bussey Institution and at the Connecticut Experiment Station at Middletown, beginning in 1875, and at New Haven, beginning in 1877, as well as those made still earlier at New Haven in the Sheffield Scientific School, were all done by the original Weende methods of Henneberg and Stohmann until the methods were modified to accord with those of the Association of Official Agricultural Chemists. These include nearly all the analyses made previous to 1880.

The American Association of Official Agricultural Chemists, which was organized in 1884 and which first took up the consideration of methods of the proximate analysis of feeding stuffs in 1887, has done very much to introduce uniformity into the methods and work of all

laboratories in this country, and it is believed that since 1887 the official methods of the Association have come into use in nearly all our station laboratories. In view of this fact we have aimed to arrange the different analyses of each material in something like chronological order. Other things being equal, the later analyses of different laboratories should be more nearly comparable with each other than the older analyses.

Realizing the difficulties and uncertainties of computing averages from the data collected, we have still felt justified in inserting statements of the average composition of most of the feeding stuffs. Our object has been to supply data which might serve as a help and general guide in practical cattle feeding till further study and more accurate analyses shall provide something better.

It is too much to hope that this work is free from errors. The compilers therefore request that any errors or omissions discovered in it may be reported to them, that such correction as is possible may be made.

*Connecticut Agricultural Experiment Station,*
*New Haven, Connecticut, May 20, 1891.*

# AVERAGE COMPOSITION OF AMERICAN FEEDING STUFFS.

# AVERAGE COMPOSITION OF AMERICAN

COMPILED AND CALCULATED BY E. H.

| | Number of analyses. | In fresh or air-dry material. | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | | | Ash. | | | Protein (N×6.25). | | |
| | | Minimum. | Maximum. | Average. | Minimum. | Maximum. | Average. | Minimum. | Maximum. | Average. |
| **GREEN FODDER.** | | | | | | | | | | |
| CEREAL GRASSES: | | | | | | | | | | |
| Corn (maize) fodder *a*— | % | % | % | % | % | % | % | % | % | % |
| Flint varieties | 40 | 51.5 | 90.8 | 79.8 | 0.7 | 1.8 | 1.1 | 0.6 | 4.0 | 2.0 |
| Flint varieties, cut after kernels had glazed | 10*b* | 69.7 | 83.7 | 77.1 | 0.9 | 1.7 | 1.1 | 1.5 | 2.7 | 2.1 |
| Dent varieties | 63 | 59.5 | 93.6 | 79.0 | 0.6 | 2.5 | 1.2 | 0.5 | 3.8 | 1.7 |
| Dent varieties, cut after kernels had glazed | 7 | 59.5 | 80.7 | 73.4 | 1.0 | 2.2 | 1.5 | 1.0 | 3.3 | 2.0 |
| Sweet varieties | 21 | 69.3 | 92.9 | 79.1 | 0.8 | 2.6 | 1.3 | 0.9 | 2.7 | 1.9 |
| All varieties | 126*c* | 51.5 | 93.6 | 79.3 | 0.6 | 2.6 | 1.2 | 0.5 | 4.0 | 1.8 |
| Leaves and husks, cut green | 4 | 57.9 | 71.3 | 66.2 | 2.1 | 4.4 | 2.9 | 1.8 | 2.4 | 2.1 |
| Stripped stalks, cut green | 4 | 74.5 | 77.4 | 76.1 | 0.6 | 0.8 | 0.7 | 0.4 | 0.6 | 0.5 |
| Sorghum, whole plant | 11 | 63.9 | 86.4 | 79.4 | 0.7 | 2.3 | 1.1 | 0.9 | 2.6 | 1.3 |
| Rye fodder | 7 | 74.7 | 84.3 | 76.6 | 1.3 | 2.4 | 1.8 | 2.3 | 3.0 | 2.6 |
| Oat fodder | 5 | 31.3 | 78.6 | 62.2 | 1.5 | 4.2 | 2.5 | 1.5 | 6.1 | 3.4 |
| OTHER GRASSES: | | | | | | | | | | |
| Redtop *d* (*Agrostis vulgaris*) in bloom | 5 | 57.3 | 76.2 | 64.8 | 1.7 | 2.8 | 2.3 | 2.0 | 4.3 | 3.3 |
| Tall oat grass *e* (*Arrhenatherum avenaceum*) in bloom | 3 | 62.3 | 73.5 | 69.5 | 1.6 | 3.0 | 2.0 | 1.7 | 3.3 | 2.4 |
| Orchard grass (*Daetylis glomerata*) in bloom | 4 | 66.9 | 77.3 | 73.0 | 1.6 | 2.9 | 2.0 | 1.9 | 4.1 | 2.6 |
| Meadow fescue (*festuca pratensis*) in bloom | 4 | 67.6 | 73.2 | 69.9 | 1.6 | 2.0 | 1.8 | 1.8 | 2.7 | 2.4 |
| Timothy *f* (*Phleum pratense*)— | | | | | | | | | | |
| All analyses | 56 | 47.0 | 78.7 | 61.6 | 1.4 | 3.2 | 2.1 | 1.3 | 3.8 | 3.1 |
| Before bloom, headed | 3 | 61.7 | 78.6 | 69.3 | 1.8 | 1.8 | 2.3 | 3.0 | 3.6 | 3.4 |
| In full bloom | 14 | 57.3 | 71.9 | 65.1 | 1.4 | 2.5 | 2.0 | 1.3 | 3.7 | 2.8 |
| Just after bloom | 5 | 56.3 | 65.2 | 59.4 | 1.7 | 2.9 | 2.3 | 2.0 | 3.8 | 2.9 |
| In seed, nearly ripe | 4 | 53.0 | 77.8 | 62.3 | 1.6 | 2.8 | 2.2 | 2.0 | 3.0 | 2.5 |
| Kentucky blue grass *g* (*Poa pratensis*)— | | | | | | | | | | |
| All analyses | 18 | 51.7 | 82.5 | 65.1 | 1.6 | 4.8 | 2.8 | 2.4 | 7.2 | 4.1 |
| Before bloom, headed | 3 | 59.9 | 70.8 | 64.7 | 1.6 | 3.7 | 2.8 | 4.1 | 7.2 | 5.3 |
| In bloom | 5 | 62.9 | 75.7 | 69.1 | 1.6 | 3.1 | 2.4 | 2.4 | 3.6 | 3.2 |
| Past bloom and in seed | 4 | 51.7 | 55.9 | 54.4 | 2.8 | 4.8 | 3.4 | 3.3 | 5.5 | 4.2 |
| LEGUMES: | | | | | | | | | | |
| Red clover (*Trifolium pratense*)— | | | | | | | | | | |
| All analyses | 43 | 47.1 | 91.8 | 70.8 | 0.9 | 4.0 | 2.1 | 1.7 | 7.1 | 4.4 |
| Before bloom | 2 | 61.2 | 82.7 | 72.0 | 1.5 | 3.2 | 2.4 | 4.4 | 5.5 | 5.0 |
| In bloom | 5 | 47.1 | 91.8 | 72.7 | 0.9 | 4.0 | 2.2 | 1.7 | 7.1 | 4.3 |
| After bloom and in seed | 4 | 61.1 | 74.2 | 68.2 | 1.9 | 2.5 | 2.2 | 4.0 | 5.5 | 4.5 |
| Alsike clover *h* (*Trifolium hybridum*) in bloom | 4 | 72.3 | 77.3 | 74.8 | 1.9 | 2.1 | 2.0 | 3.6 | 4.2 | 3.9 |
| Alfalfa *i* (*Medicago sativa*)— | | | | | | | | | | |
| All analyses | 23 | 49.3 | 82.0 | 71.8 | 1.8 | 5.1 | 2.7 | 3.5 | 7.7 | 4.8 |
| Cowpea (*Dolichos*) | 10 | 72.8 | 93.1 | 83.6 | 1.2 | 2.7 | 1.7 | 1.5 | 3.5 | 2.4 |
| Soja bean (*Soja hispida*) | 6 | 69.4 | 81.2 | 74.8 | 2.2 | 2.6 | 2.4 | 2.2 | 3.9 | 3.0 |
| **SILAGE.** | | | | | | | | | | |
| Corn (maize) silage | 99 | 62.4 | 87.7 | 79.1 | 0.3 | 3.3 | 1.4 | 0.7 | 3.6 | 1.7 |
| Corn (maize) kernels, ensiled | 9 | 21.1 | 54.4 | 41.3 | 0.6 | 1.7 | 1.0 | 4.6 | 10.1 | 6.0 |
| Sorghum silage | 6 | 71.9 | 78.0 | 76.1 | 0.8 | 1.2 | 1.1 | 0.6 | 0.9 | 0.8 |
| Brewers' grain silage | 3 | 66.8 | 73.9 | 69.8 | 1.0 | 1.4 | 1.2 | 5.9 | 7.1 | 6.6 |
| Red clover silage | 5 | 61.4 | 78.6 | 72.0 | 1.9 | 3.0 | 2.6 | 3.0 | 5.9 | 4.2 |

*a* Corn fodder is the entire plant, usually a thickly planted crop. Corn stover is what is left after the ears are harvested.

*b* Included in the analyses immediately preceding.

*c* Including two unclassified varieties.

*d* Herd's grass of Pennsylvania.

*e* Meadow oat grass.

*f* Herd's grass of New England and New York.

*g* June grass.

*h* Swedish clover.

*i* Lucern.

## FEEDING STUFFS, WITH MAXIMA AND MINIMA.

JENKINS AND A. L. WINTON.

| In fresh or air-dry material. | | | | | | | | | Calculated to water-free substance. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fiber. | | | Nitrogen-free extract. | | | Fat. | | | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. |
| Minimum. | Maximum. | Average. | Minimum. | Maximum. | Average. | Minimum. | Maximum. | Average. | Average. | Average. | Average. | Average. | Average. |
| % | % | % | % | % | % | % | % | % | % | % | % | % | % |
| 2.1 | 11.4 | 4.3 | 4.3 | 36.3 | 12.1 | 0.3 | 1.3 | 0.7 | 5.2 | 9.7 | 21.3 | 60.6 | 3.2 |
| 3.0 | 6.1 | 4.3 | 10.0 | 19.7 | 14.6 | 0.6 | 1.3 | 0.8 | 5.0 | 9.2 | 18.9 | 63.2 | 3.7 |
| 2.0 | 11.0 | 5.6 | 3.0 | 27.0 | 12.0 | 0.1 | 1.6 | 0.5 | 5.7 | 8.3 | 26.3 | 57.1 | 2.6 |
| 5.4 | 8.5 | 6.7 | 11.6 | 27.0 | 15.5 | 0.4 | 1.6 | 0.9 | 5.4 | 7.5 | 25.2 | 58.7 | 3.2 |
| 1.9 | 8.5 | 4.4 | 3.2 | 19.4 | 12.8 | 0.1 | 1.0 | 0.5 | 6.0 | 8.9 | 21.2 | 61.7 | 2.2 |
| 1.9 | 11.4 | 5.0 | 3.0 | 36.3 | 12.2 | 0.1 | 1.6 | 0.5 | 5.6 | 8.8 | 24.1 | 58.9 | 2.6 |
| 6.6 | 12.5 | 8.7 | 16.7 | 22.2 | 19.0 | 1.0 | 1.3 | 1.1 | 8.5 | 6.2 | 25.7 | 56.4 | 3.2 |
| 6.7 | 8.8 | 7.3 | 14.2 | 16.0 | 14.9 | 0.4 | 0.6 | 0.5 | 2.9 | 2.3 | 30.7 | 62.0 | 2.1 |
| 4.7 | 9.1 | 6.1 | 5.3 | 21.5 | 11.6 | 0.2 | 1.1 | 0.5 | 5.3 | 6.5 | 29.7 | 56.2 | 2.3 |
| 4.7 | 14.9 | 11.6 | 4.9 | 12.4 | 6.8 | 0.2 | 0.7 | 0.6 | 7.7 | 11.1 | 49.5 | 29.2 | 2.5 |
| 7.1 | 16.8 | 11.2 | 10.8 | 39.8 | 19.3 | 0.4 | 3.0 | 1.4 | 6.6 | 9.1 | 29.5 | 51.1 | 3.7 |
| 6.5 | 15.7 | 9.4 | 11.7 | 24.1 | 19.1 | 0.6 | 2.2 | 1.2 | 6.6 | 9.4 | 26.8 | 53.9 | 3.3 |
| 9.2 | 9.7 | 9.4 | 13.0 | 20.7 | 15.8 | 0.6 | 1.5 | 0.9 | 6.7 | 7.8 | 30.7 | 51.8 | 3.0 |
| 5.8 | 11.1 | 8.2 | 9.9 | 16.6 | 13.3 | 0.7 | 1.3 | 0.9 | 7.4 | 9.6 | 30.4 | 49.3 | 3.3 |
| 10.2 | 11.3 | 10.8 | 12.5 | 15.7 | 14.3 | 0.7 | 1.1 | 0.8 | 6.0 | 8.0 | 35.7 | 47.5 | 2.8 |
| 5.1 | 19.4 | 11.8 | 10.1 | 28.6 | 20.2 | 0.6 | 2.0 | 1.2 | 5.4 | 8.0 | 30.7 | 52.8 | 3.1 |
| 5.1 | 12.7 | 8.3 | 10.1 | 19.4 | 15.7 | 0.8 | 1.3 | 1.1 | 7.7 | 11.3 | 26.3 | 50.9 | 3.8 |
| 6.4 | 13.9 | 10.4 | 13.9 | 22.4 | 18.7 | 0.7 | 1.5 | 1.0 | 5.7 | 7.9 | 29.9 | 53.6 | 2.9 |
| 11.1 | 13.7 | 12.6 | 18.0 | 23.6 | 21.5 | 0.9 | 2.0 | 1.3 | 5.7 | 7.1 | 30.9 | 53.2 | 3.1 |
| 5.1 | 15.8 | 11.5 | 11.3 | 28.6 | 20.4 | 0.8 | 1.8 | 1.1 | 5.7 | 6.6 | 30.7 | 54.2 | 2.8 |
| 3.8 | 14.8 | 9.1 | 6.5 | 26.6 | 17.6 | 0.8 | 1.9 | 1.3 | 8.0 | 11.8 | 26.2 | 50.3 | 3.7 |
| 6.7 | 12.8 | 9.5 | 14.9 | 19.0 | 16.3 | 1.2 | 1.6 | 1.4 | 8.0 | 15.1 | 26.8 | 46.1 | 4.0 |
| 6.7 | 10.8 | 8.3 | 11.2 | 18.7 | 16.1 | 0.8 | 1.2 | 0.9 | 7.7 | 10.3 | 26.7 | 52.3 | 3.0 |
| 10.6 | 14.8 | 11.8 | 23.2 | 26.6 | 24.5 | 1.5 | 1.9 | 1.7 | 7.5 | 9.1 | 25.8 | 53.9 | 3.7 |
| 1.8 | 14.7 | 8.1 | 3.5 | 25.8 | 13.5 | 0.3 | 1.8 | 1.1 | 7.2 | 15.3 | 27.8 | 45.8 | 3.9 |
| 2.3 | 10.8 | 6.5 | 8.1 | 18.6 | 13.3 | 0.7 | 1.0 | 0.8 | 8.6 | 17.8 | 23.2 | 47.5 | 2.9 |
| 1.8 | 14.7 | 6.5 | 3.5 | 25.8 | 13.4 | 0.3 | 1.3 | 0.9 | 8.1 | 15.7 | 23.8 | 49.2 | 3.2 |
| 5.0 | 12.4 | 7.2 | 12.9 | 20.2 | 16.7 | 0.9 | 1.7 | 1.2 | 6.9 | 14.2 | 22.6 | 52.5 | 3.8 |
| 5.3 | 9.4 | 7.4 | 10.8 | 11.5 | 11.0 | 0.6 | 1.2 | 0.9 | 7.8 | 15.3 | 29.2 | 44.0 | 3.7 |
| 2.5 | 14.8 | 7.4 | 7.9 | 26.2 | 12.3 | 0.5 | 2.2 | 1.0 | 9.4 | 17.1 | 26.2 | 43.9 | 3.4 |
| 1.7 | 15.3 | 4.8 | 1.8 | 12.9 | 7.1 | 0.2 | 0.6 | 0.4 | 10.5 | 14.3 | 29.0 | 43.6 | 2.6 |
| 5.6 | 8.9 | 7.3 | 5.8 | 16.0 | 11.5 | 0.7 | 1.5 | 1.0 | 9.5 | 12.0 | 29.0 | 45.7 | 3.8 |
| 3.0 | 10.5 | 6.0 | 5.1 | 24.2 | 11.1 | 0.2 | 2.0 | 0.8 | 6.6 | 8.0 | 28.7 | 53.0 | 3.8* |
| 0.8 | 3.7 | 1.5 | 35.7 | 59.1 | 46.6 | 2.8 | 4.4 | 3.6 | 1.7 | 10.2 | 2.6 | 79.4 | 6.1 |
| 5.9 | 6.8 | 6.4 | 13.8 | 19.0 | 15.3 | 0.1 | 0.5 | 0.3 | 4.4 | 3.3 | 26.8 | 64.2 | 1.3 |
| 3.9 | 5.4 | 4.7 | 13.7 | 16.9 | 15.6 | 1.8 | 2.6 | 2.1 | 4.0 | 22.0 | 15.4 | 51.7 | 7.0 |
| 5.1 | 13.9 | 8.4 | 8.1 | 14.3 | 11.6 | 0.9 | 1.6 | 1.2 | 9.3 | 14.9 | 29.9 | 41.7 | 4.1 |

| | No. of analyses. | In fresh or air-dry material. | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | | | Ash. | | | Protein (N×6.25). | | |
| | | Minimum. | Maximum. | Average. | Minimum. | Maximum. | Average. | Minimum. | Maximum. | Average. |
| HAY AND DRY COARSE FODDER. | | % | % | % | % | % | % | % | % | % |
| Corn (maize) fodder, field-cured | 35 | 22.9 | 60.2 | **42.2** | 1.5 | 5.5 | **2.7** | 2.7 | 6.8 | **4.5** |
| Corn (maize) leaves, field-cured | 17 | 14.8 | 44.0 | **30.0** | 4.3 | 7.4 | **5.5** | 4.5 | 8.3 | **6.0** |
| Corn (maize) husks, field-cured | 16 | 26.7 | 76.6 | **50.9** | 0.6 | 2.3 | **1.8** | 1.3 | 3.2 | **2.5** |
| Corn (maize) stalks, field-cured | 15 | 51.3 | 78.5 | **68.4** | 0.6 | 2.0 | **1.2** | 1.2 | 3.0 | **1.9** |
| Corn (maize) stover, field-cured | 60 | 15.4 | 57.4 | **40.1** | 1.7 | 7.0 | **3.4** | 1.8 | 8.3 | **3.8** |
| Hay from grasses named: | | | | | | | | | | |
| Couch grass *a* (*Agropyrum repens*) | 5 | 6.3 | 14.3 | **14.3** | 4.8 | 8.0 | **6.0** | 8.5 | 10.8 | **8.8** |
| Redtop (*Agrostis vulgaris*)— | | | | | | | | | | |
| All analyses | 9 | 6.8 | 11.6 | **8.9** | 3.8 | 7.0 | **5.2** | 5.9 | 10.4 | **7.9** |
| Cut in bloom | 3 | 6.8 | 11.6 | **8.7** | 4.8 | 6.5 | **4.9** | 7.8 | 10.4 | **8.0** |
| Orchard grass (*Dactylis glomerata*) | 10 | 6.5 | 13.6 | **9.9** | 5.0 | 7.9 | **6.0** | 6.6 | 10.4 | **8.1** |
| Timothy (*Phleum pratense*)— | | | | | | | | | | |
| All analyses | 68 | 6.1 | 28.9 | **13.2** | 2.5 | 6.3 | **4.4** | 3.8 | 9.7 | **5.9** |
| Cut in full bloom | 12 | 7.0 | 28.9 | **15.0** | 2.5 | 6.0 | **4.5** | 5.0 | 7.5 | **6.0** |
| Cut soon after bloom | 11 | 7.8 | 21.6 | **14.2** | 3.5 | 5.4 | **4.4** | 4.6 | 8.1 | **5.7** |
| Cut when nearly ripe | 12 | 7.0 | 22.7 | **14.1** | 2.7 | 5.1 | **3.9** | 4.3 | 6.0 | **5.0** |
| Hungarian grass (*Setaria italica*) | 12 | 4.9 | 9.5 | **7.7** | 5.0 | 7.5 | **6.0** | 4.7 | 12.3 | **7.5** |
| Creek sedge (*Spartina stricta*, var. *glabra*) | 5 | 7.4 | 9.7 | **8.3** | 8.3 | 15.3 | **10.7** | 4.0 | 8.4 | **6.6** |
| Hay from legumes named: | | | | | | | | | | |
| Red clover (*Trifolium pratense*)— | | | | | | | | | | |
| All analyses | 38 | 6.0 | 31.3 | **15.3** | 3.9 | 8.3 | **6.2** | 10.0 | 20.8 | **12.3** |
| In bloom | 6 | 6.0 | 31.3 | **20.8** | 5.6 | 8.3 | **6.6** | 10.8 | 15.4 | **12.4** |
| Red clover (*Trifolium medium*)— | | | | | | | | | | |
| All analyses | 10 | 7.3 | 29.4 | **21.2** | 4.5 | 9.5 | **6.1** | 9.0 | 16.8 | **10.7** |
| In bloom | 5 | 9.4 | 26.7 | **20.9** | 4.5 | 9.5 | **6.6** | 9.0 | 16.8 | **11.5** |
| Alsike clover (*Trifolium hybridum*) | 9 | 5.3 | 13.9 | **9.7** | 6.1 | 12.2 | **8.3** | 9.2 | 16.1 | **12.8** |
| White clover (*Trifolium repens*) | 7 | 6.1 | 13.5 | **9.7** | 4.5 | 13.8 | **8.3** | 13.9 | 20.0 | **15.7** |
| Alfalfa (*Medicago sativa*) | 21 | 4.6 | 16.0 | **8.4** | 3.1 | 10.4 | **7.4** | 10.2 | 20.3 | **14.3** |
| Cowpea (*Dolichos*) | 8 | 7.6 | 14.0 | **10.7** | 3.2 | 10.2 | **7.5** | 13.6 | 20.3 | **16.6** |
| Black grass (*Juncus gerardi*) | 20 | 6.7 | 13.2 | **9.5** | 4.9 | 9.2 | **7.0** | 5.3 | 11.6 | **7.5** |
| Wheat straw | 7 | 6.5 | 17.9 | **9.6** | 3.0 | 7.0 | **4.2** | 2.9 | 5.0 | **3.4** |
| Rye straw | 7 | 6.3 | 9.7 | **7.1** | 2.8 | 3.4 | **3.2** | 2.2 | 3.6 | **3.0** |
| Oat straw | 12 | 6.5 | 18.3 | **9.2** | 3.7 | 6.7 | **5.1** | 2.7 | 6.9 | **4.0** |
| Buckwheat straw | 3 | 9.0 | 10.4 | **9.9** | 4.9 | 6.5 | **5.5** | 3.3 | 7.8 | **5.2** |
| ROOTS, BULBS, TUBERS, AND OTHER VEGETABLES. | | | | | | | | | | |
| Potatoes | 12 | 75.4 | 82.2 | **78.9** | 0.8 | 1.2 | **1.0** | 1.1 | 3.0 | **2.1** |
| Sweet potatoes | 6 | 66.0 | 74.4 | **71.1** | 0.7 | 1.3 | **1.0** | 0.5 | 3.6 | **1.5** |
| Red beets | 9 | 85.5 | 92.2 | **88.5** | 0.7 | 1.4 | **1.0** | 1.1 | 1.8 | **1.5** |
| Sugar beets | 19 | 80.5 | 90.8 | **86.5** | 0.4 | 1.4 | **0.9** | 1.1 | 3.2 | **1.8** |
| Mangel-wurzels | 9 | 86.9 | 94.4 | **90.9** | 0.8 | 1.4 | **1.1** | 1.0 | 1.9 | **1.4** |
| Turnips | 3 | 87.2 | 92.4 | **90.5** | 0.7 | 1.0 | **0.8** | 0.8 | 1.4 | **1.1** |
| Ruta-bagas | 4 | 87.1 | 91.8 | **88.6** | 1.0 | 1.4 | **1.2** | 1.0 | 1.3 | **1.2** |
| Carrots | 8 | 86.5 | 91.1 | **88.6** | 0.6 | 1.3 | **1.0** | 0.8 | 2.0 | **1.1** |
| Onions | 6 | 81.5 | 93.5 | **87.6** | 0.4 | 0.7 | **0.6** | 0.8 | 2.3 | **1.4** |
| Cucumbers | 2 | 95.7 | 96.3 | **96.0** | 0.5 | 0.5 | **0.5** | 0.8 | 0.8 | **0.8** |
| Cabbage | 2 | 87.5 | 93.6 | **90.5** | 0.7 | 2.1 | **1.4** | 2.1 | 2.7 | **2.4** |
| Asparagus | 3 | 93.6 | 94.3 | **94.0** | 0.5 | 1.0 | **0.7** | 1.6 | 2.1 | **1.8** |
| Strawberries | 19 | 87.7 | 94.0 | **90.8** | 0.4 | 0.8 | **0.6** | 0.6 | 1.2 | **1.0** |
| Lemons | 2 | 88.4 | 90.2 | **89.3** | 0.5 | 0.5 | **0.5** | 0.8 | 1.1 | **1.0** |
| GRAINS AND OTHER SEEDS. | | | | | | | | | | |
| Corn (maize) kernel— | | | | | | | | | | |
| Dent, raised in Connecticut | 9 | 9.6 | 15.2 | **10.8** | 1.2 | 1.8 | **1.5** | 8.3 | 11.6 | **10.1** |
| Dent, raised in Kansas | 6 | 11.4 | 12.3 | **11.9** | 1.3 | 1.7 | **1.5** | 9.1 | 10.7 | **10.2** |

*a* Corn fodder is the entire plant, usually a thickly planted crop; corn stover is what is left after the ears are harvested.

STUFFS, WITH MAXIMA AND MINIMA—Continued.

| In fresh or air-dry material. | | | | | | | | | Calculated to water-free substance. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Crude fiber. | | | Nitrogen-free extract. | | | Fat. | | | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. |
| Minimum. | Maximum. | Average. | Minimum. | Maximum. | Average. | Minimum. | Maximum. | Average. | Average. | Average. | Average. | Average. | Average. |
| % | % | % | % | % | % | % | % | % | % | % | % | % | % |
| 7.5 | 24.7 | 14.3 | 20.6 | 47.8 | 34.7 | 0.6 | 2.5 | 1.6 | 4.7 | 7.8 | 24.7 | 60.1 | 2.8 |
| 17.4 | 27.4 | 21.4 | 27.3 | 44.1 | 35.7 | 0.8 | 2.2 | 1.4 | 7.9 | 8.6 | 30.6 | 51.0 | 1.9 |
| 6.8 | 23.6 | 15.8 | 14.3 | 43.6 | 28.3 | 0.5 | 1.0 | 0.7 | 3.5 | 5.0 | 32.2 | 57.9 | 1.4 |
| 6.9 | 16.8 | 11.0 | 11.2 | 26.0 | 17.0 | 0.3 | 1.0 | 0.5 | 3.6 | 5.9 | 34.8 | 54.1 | 1.6 |
| 14.1 | 32.2 | 19.7 | 23.3 | 53.3 | 31.9 | 0.7 | 2.2 | 1.1 | 5.7 | 6.4 | 33.0 | 53.2 | 1.7 |
| 16.6 | 34.5 | 24.8 | 38.5 | 49.5 | 43.1 | 2.9 | 3.4 | 3.0 | 7.0 | 10.3 | 29.1 | 50.2 | 3.5 |
| 24.0 | 31.8 | 28.6 | 44.8 | 50.4 | 47.4 | 1.4 | 3.2 | 1.9 | 5.7 | 8.7 | 31.4 | 52.1 | 2.1 |
| 24.0 | 31.8 | 29.9 | 46.8 | 47.8 | 46.4 | 1.5 | 2.3 | 2.1 | 5.4 | 8.7 | 32.8 | 50.8 | 2.3 |
| 28.9 | 38.3 | 32.4 | 32.9 | 48.6 | 41.0 | 1.7 | 3.3 | 2.6 | 6.7 | 9.0 | 36.0 | 45.4 | 2.9 |
| 22.2 | 38.5 | 29.0 | 34.3 | 58.5 | 45.0 | 1.0 | 4.0 | 2.5 | 5.1 | 6.8 | 33.5 | 51.7 | 2.9 |
| 22.2 | 37.1 | 29.6 | 34.3 | 48.5 | 41.9 | 2.0 | 4.0 | 3.0 | 5.3 | 7.1 | 34.7 | 49.4 | 3.5 |
| 25.7 | 33.4 | 28.1 | 37.0 | 51.0 | 44.6 | 1.9 | 3.6 | 3.0 | 5.1 | 6.6 | 32.7 | 52.1 | 3.5 |
| 24.8 | 38.5 | 31.1 | 38.0 | 49.1 | 43.7 | 1.0 | 2.8 | 2.2 | 4.5 | 5.8 | 36.2 | 50.9 | 2.6 |
| 23.6 | 31.3 | 27.7 | 44.4 | 53.0 | 49.0 | 1.5 | 3.5 | 2.1 | 6.5 | 8.1 | 30.0 | 53.1 | 2.3 |
| 25.5 | 27.7 | 26.9 | 39.0 | 51.3 | 45.4 | 1.8 | 2.2 | 2.1 | 11.6 | 7.1 | 29.3 | 49.7 | 2.3 |
| 15.6 | 35.7 | 24.8 | 27.3 | 52.2 | 38.1 | 1.5 | 5.9 | 3.3 | 7.3 | 14.5 | 29.1 | 45.2 | 3.9 |
| 17.9 | 28.1 | 21.9 | 27.3 | 41.3 | 33.8 | 2.5 | 5.9 | 4.5 | 8.3 | 15.6 | 27.5 | 43.0 | 5.6 |
| 18.3 | 29.4 | 24.5 | 28.6 | 44.4 | 33.6 | 1.6 | 5.3 | 3.9 | 7.3 | 13.5 | 31.3 | 43.0 | 4.9 |
| 18.3 | 27.8 | 24.7 | 28.6 | 44.4 | 33.0 | 1.6 | 5.1 | 3.3 | 8.2 | 14.6 | 31.1 | 41.9 | 4.2 |
| 19.7 | 29.5 | 25.6 | 35.6 | 45.9 | 40.7 | 1.6 | 4.2 | 2.9 | 9.3 | 14.2 | 28.4 | 44.9 | 3.2 |
| 20.3 | 30.3 | 24.1 | 33.4 | 47.3 | 39.3 | 1.7 | 5.8 | 2.9 | 9.2 | 17.4 | 26.7 | 43.5 | 3.2 |
| 14.0 | 33.0 | 25.0 | 35.1 | 53.6 | 42.7 | 1.1 | 3.8 | 2.2 | 8.1 | 15.6 | 27.3 | 46.6 | 2.4 |
| 16.4 | 26.0 | 20.1 | 39.4 | 49.5 | 42.2 | 1.1 | 3.7 | 2.9 | 8.5 | 18.6 | 22.5 | 47.2 | 3.2 |
| 20.4 | 35.9 | 25.9 | 42.6 | 53.4 | 47.7 | 1.1 | 3.2 | 2.4 | 7.6 | 8.2 | 28.5 | 53.0 | 2.7 |
| 34.3 | 42.7 | 38.1 | 31.0 | 50.6 | 43.4 | 0.8 | 1.8 | 1.3 | 4.6 | 3.8 | 42.1 | 48.1 | 1.4 |
| 32.7 | 43.3 | 38.9 | 41.0 | 52.9 | 46.6 | 1.0 | 1.6 | 1.2 | 3.4 | 3.2 | 41.9 | 50.2 | 1.3 |
| 31.8 | 45.1 | 37.0 | 33.5 | 51.4 | 42.4 | 1.7 | 3.2 | 2.3 | 5.6 | 4.4 | 40.7 | 46.8 | 2.5 |
| 37.2 | 46.8 | 43.0 | 32.1 | 38.9 | 35.1 | 0.7 | 1.7 | 1.3 | 6.1 | 5.8 | 47.7 | 39.0 | 1.4 |
| 0.3 | 0.9 | 0.6 | 14.1 | 20.4 | 17.3 | 0.0 | 0.1 | 0.1 | 4.5 | 10.1 | 2.7 | 82.2 | 0.5 |
| 0.6 | 2.5 | 1.3 | 18.0 | 29.7 | 24.7 | 0.3 | 0.6 | 0.4 | 3.5 | 5.2 | 3.6 | 86.3 | 1.4 |
| 0.6 | 1.7 | 0.9 | 3.8 | 11.3 | 8.0 | 0.1 | 0.2 | 0.1 | 9.1 | 13.4 | 7.8 | 68.4 | 1.3 |
| 0.6 | 1.3 | 0.9 | 5.7 | 13.6 | 9.8 | 0.1 | 0.2 | 0.1 | 6.5 | 13.0 | 6.5 | 73.3 | 0.7 |
| 0.6 | 1.3 | 0.9 | 2.4 | 8.7 | 5.5 | 0.1 | 0.5 | 0.2 | 11.5 | 15.2 | 9.5 | 62.0 | 1.8 |
| 0.8 | 1.4 | 1.2 | 4.2 | 8.8 | 6.2 | 0.1 | 0.2 | 0.2 | 8.4 | 12.4 | 12.2 | 64.9 | 2.1 |
| 1.1 | 1.4 | 1.3 | 5.1 | 9.1 | 7.5 | 0.1 | 0.3 | 0.2 | 10.1 | 10.4 | 11.0 | 66.8 | 1.3 |
| 0.9 | 2.3 | 1.3 | 5.1 | 10.4 | 7.6 | 0.2 | 0.7 | 0.4 | 8.8 | 10.0 | 11.2 | 66.3 | 3.7 |
| 0.6 | 0.8 | 0.7 | 3.8 | 14.7 | 9.4 | 0.2 | 0.4 | 0.3 | 4.5 | 11.3 | 5.5 | 76.5 | 2.2 |
| 0.5 | 0.9 | 0.7 | 1.7 | 2.0 | 1.8 | 0.2 | 0.2 | 0.2 | 11.5 | 20.3 | 17.3 | 45.4 | 5.5 |
| 1.4 | 1.5 | 1.5 | 2.0 | 5.7 | 3.9 | 0.2 | 0.5 | 0.4 | 14.8 | 25.1 | 15.5 | 40.7 | 3.9 |
| 0.7 | 0.8 | 0.7 | 2.3 | 2.9 | 2.5 | 0.2 | 0.3 | 0.3 | 11.1 | 30.2 | 12.2 | 42.3 | 4.2 |
| 0.7 | 2.3 | 1.4 | 3.7 | 6.4 | 5.5 | 0.4 | 1.1 | 0.7 | 6.5 | 10.4 | 15.6 | 60.1 | 7.4 |
| 0.9 | 1.3 | 1.1 | 6.9 | 7.6 | 7.2 | 0.2 | 1.6 | 0.9 | 4.7 | 8.8 | 10.1 | 67.9 | 8.5 |
| 1.3 | 2.2 | 1.7 | 69.8 | 73.4 | 71.3 | 3.8 | 5.2 | 4.4 | 1.7 | 11.3 | 1.8 | 80.1 | 5.0 |
| 1.7 | 2.7 | 2.2 | 68.4 | 71.7 | 69.3 | 4.5 | 5.7 | 4.9 | 1.7 | 11.6 | 2.5 | 78.6 | 5.6 |

| | Number of analyses. | In fresh or air-dry material. | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | | | Ash. | | | Protein (N×6.25). | | |
| | | Minimum. | Maximum. | Average. | Minimum. | Maximum. | Average. | Minimum. | Maximum. | Average. |
| **GRAINS AND OTHER SEEDS—Continued.** | | | | | | | | | | |
| | | % | % | % | % | % | % | % | % | % |
| **Corn (maize) kernel—continued.** | | | | | | | | | | |
| Dent, raised in Michigan | 7 | 11.7 | 14.1 | **13.1** | 1.3 | 1.6 | **1.4** | 9.9 | 11.8 | **11.0** |
| Dent, raised in Missouri | 22 | 7.4 | 9.1 | **8.2** | 1.3 | 2.1 | **1.7** | 8.2 | 12.8 | **10.5** |
| Dent, raised in Texas | 19 | 9.3 | 12.1 | **10.6** | 1.0 | 1.7 | **1.4** | 9.8 | 11.0 | **10.4** |
| Dent, raised in Wisconsin | 5 | 13.7 | 19.4 | **17.0** | 1.3 | 2.6 | **1.7** | 8.7 | 10.3 | **9.4** |
| Dent, all analyses | 86 | 6.2 | 19.4 | **10.6** | 1.0 | 2.6 | **1.5** | 7.5 | 12.8 | **10.3** |
| Flint, raised in Connecticut | 11 | 8.7 | 18.2 | **14.2** | 1.0 | 1.6 | **1.3** | 8.9 | 11.6 | **10.1** |
| Flint, raised in Massachusetts | 12 | 8.9 | 14.4 | **11.1** | 1.1 | 1.6 | **1.4** | 7.9 | 12.9 | **11.1** |
| Flint, raised in Michigan | 4 | 12.9 | 13.5 | **13.2** | 1.4 | 1.5 | **1.5** | 10.7 | 12.0 | **11.5** |
| Flint, raised in New Hampshire | 11 | 8.3 | 11.5 | **10.1** | 1.3 | 1.8 | **1.5** | 10.5 | 13.7 | **11.6** |
| Flint, all analyses | 68 | 4.5 | 19.6 | **11.3** | 1.0 | 1.9 | **1.4** | 7.0 | 13.7 | **10.5** |
| Sweet, raised in Massachusetts | 6 | 6.3 | 10.9 | **8.7** | 1.6 | 1.9 | **1.8** | 11.6 | 14.4 | **12.8** |
| Sweet, raised in Pennsylvania | 8 | 7.0 | 9.5 | **8.0** | 1.7 | 2.4 | **2.0** | 9.5 | 11.7 | **10.7** |
| Sweet, all analyses | 26 | 6.0 | 10.9 | **8.8** | 1.4 | 2.4 | **1.9** | 9.5 | 15.3 | **11.6** |
| Pop varieties | 4 | 8.6 | 12.6 | **10.7** | 1.2 | 1.7 | **1.5** | 9.7 | 13.1 | **11.2** |
| Soft varieties | 5 | 6.1 | 14.1 | **9.3** | 1.4 | 1.9 | **1.6** | 8.8 | 14.6 | **11.4** |
| All varieties and analyses | 208 | 4.5 | 20.7 | **10.9** | 1.0 | 2.6 | **1.5** | 7.0 | 15.3 | **10.5** |
| Field-cured, dent varieties | 17 | 28.8 | 39.3 | **34.2** | 0.7 | 1.3 | **0.9** | 4.4 | 8.3 | **6.3** |
| Small and from immature ears | 9 | 31.2 | 57.5 | **38.9** | 0.7 | 1.2 | **0.9** | 5.4 | 8.6 | **6.8** |
| Field-cured, flint varieties | 48 | 22.0 | 32.1 | **27.1** | 0.6 | 1.6 | **1.3** | 5.6 | 10.6 | **8.0** |
| Small and from immature ears | 7 | 24.0 | 74.8 | **34.5** | 0.4 | 1.0 | **0.8** | 3.3 | 10.3 | **7.9** |
| Sorghum seed | 10 | 9.3 | 16.8 | **12.8** | 1.4 | 4.3 | **2.1** | 7.7 | 11.3 | **9.1** |
| Barley | 10 | 7.2 | 12.6 | **10.9** | 1.8 | 3.2 | **2.4** | 8.6 | 15.7 | **12.4** |
| Oats | 30 | 8.9 | 13.5 | **11.0** | 2.0 | 3.6 | **3.0** | 8.0 | 14.4 | **11.8** |
| Rye | 6 | 8.7 | 13.2 | **11.6** | 1.8 | 1.9 | **1.9** | 9.5 | 12.1 | **10.6** |
| Wheat, spring varieties | 13 | 8.1 | 13.4 | **10.4** | 1.5 | 2.6 | **1.9** | 8.1 | 15.4 | **12.5** |
| Wheat, winter varieties, raised in— | | | | | | | | | | |
| Alabama | 17 | 9.4 | 12.4 | **10.9** | 1.8 | 2.4 | **2.0** | 9.8 | 13.7 | **11.4** |
| California | 4 | 10.7 | 11.2 | **11.0** | 1.5 | 2.0 | **1.8** | 8.3 | 13.8 | **11.1** |
| Colorado | 50 | 7.9 | 10.6 | **9.6** | 1.8 | 3.6 | **2.2** | 11.2 | 15.9 | **13.3** |
| Georgia | 8 | 8.0 | 12.2 | **9.9** | 1.6 | 2.3 | **1.9** | 9.5 | 14.0 | **11.6** |
| Indiana | 8 | 9.9 | 12.4 | **10.8** | 1.4 | 2.1 | **1.8** | 11.9 | 14.5 | **13.2** |
| Maryland | 9 | 8.4 | 11.9 | **10.5** | 1.4 | 2.2 | **1.8** | 9.8 | 14.5 | **11.7** |
| Michigan | 23 | 9.1 | 13.8 | **10.8** | 1.0 | 2.1 | **1.7** | 9.1 | 15.2 | **11.6** |
| Missouri | 12 | 7.7 | 13.5 | **9.8** | 1.6 | 2.2 | **1.9** | 10.5 | 14.0 | **11.6** |
| New Jersey | 13 | 13.3 | 14.0 | **13.7** | 1.8 | 2.2 | **2.0** | 9.2 | 12.5 | **10.3** |
| North Carolina | 22 | 8.2 | 11.7 | **10.0** | 1.2 | 1.9 | **1.6** | 8.9 | 12.4 | **10.4** |
| Oregon | 5 | 9.0 | 13.0 | **9.9** | 1.5 | 2.0 | **1.7** | 8.1 | 10.6 | **8.6** |
| Pennsylvania | 41 | 7.6 | 13.3 | **10.7** | 0.8 | 3.0 | **1.6** | 9.5 | 15.6 | **11.8** |
| Tennessee | 14 | 7.1 | 11.9 | **10.2** | 1.6 | 2.4 | **1.9** | 10.0 | 16.6 | **12.5** |
| Virginia | 11 | 8.8 | 12.3 | **10.3** | 1.1 | 2.5 | **1.7** | 10.2 | 14.0 | **12.2** |
| Wheat, winter varieties, all analyses | 262 | 7.1 | 14.0 | **10.5** | 0.8 | 3.6 | **1.8** | 8.1 | 16.6 | **11.8** |
| Wheat, all complete analyses of all varieties | 310 | 7.1 | 14.0 | **10.5** | 0.8 | 3.6 | **1.8** | 8.1 | 17.2 | **11.9** |
| Rice | 10 | 11.4 | 14.0 | **12.4** | 0.3 | 0.5 | **0.4** | 5.9 | 8.6 | **7.4** |
| Buckwheat | 8 | 10.9 | 14.8 | **12.6** | 1.6 | 2.3 | **2.0** | 8.6 | 11.0 | **10.0** |
| Soja bean | 8 | 5.9 | 19.3 | **10.8** | 3.1 | 5.4 | **4.7** | 26.3 | 40.2 | **34.0** |
| Cowpea | 5 | 10.0 | 20.9 | **14.8** | 2.9 | 3.4 | **3.2** | 19.3 | 23.0 | **20.8** |
| MILL PRODUCTS. | | | | | | | | | | |
| Corn (maize) meal | 77 | 8.0 | 27.4 | **15.0** | 0.9 | 4.1 | **1.4** | 7.1 | 13.9 | **9.2** |
| Corn-and-cob meal | 7 | 9.5 | 26.3 | **15.1** | 1.2 | 1.9 | **1.5** | 5.8 | 12.2 | **8.5** |
| Oatmeal | 6 | 6.2 | 8.8 | **7.9** | 1.8 | 2.2 | **2.0** | 12.9 | 16.3 | **14.7** |
| Barley meal | 3 | 9.9 | 13.6 | **11.9** | 1.6 | 3.8 | **2.6** | 9.8 | 12.7 | **10.5** |
| Rye flour | 4 | 12.4 | 13.6 | **13.1** | 0.6 | 0.8 | **0.7** | 6.0 | 6.9 | **6.7** |
| Wheat flour, all analyses | 20 | 8.2 | 13.6 | **12.4** | 0.3 | 0.7 | **0.5** | 8.6 | 13.6 | **10.8** |
| Graham flour | 3 | 12.1 | 13.7 | **13.1** | 1.7 | 2.0 | **1.8** | 11.2 | 12.4 | **11.7** |
| Buckwheat flour | 4 | 12.8 | 17.6 | **14.6** | 0.7 | 1.3 | **1.0** | 4.2 | 8.1 | **6.9** |

STUFFS, WITH MAXIMA AND MINIMA—Continued.

| In fresh or air-dry material. | | | | | | | | | Calculated to water-free substance. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Crude fiber. | | | Nitrogen-free extract. | | | Fat. | | | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. |
| Minimum. | Maximum. | Average. | Minimum. | Maximum. | Average. | Minimum. | Maximum. | Average. | Average. | Average. | Average. | Average. | Average. |
| % | % | % | % | % | % | % | % | % | % | % | % | % | % |
| 2.0 | 2.5 | 2.3 | 66.3 | 69.1 | 67.4 | 4.6 | 5.0 | 4.8 | 1.6 | 12.6 | 2.6 | 77.7 | 5.5 |
| 1.4 | 3.1 | 2.4 | 69.8 | 74.8 | 71.8 | 4.3 | 7.5 | 5.4 | 1.9 | 11.4 | 2.6 | 78.2 | 5.9 |
| 1.8 | 4.8 | 2.8 | 66.7 | 71.4 | 69.3 | 5.0 | 6.6 | 5.5 | 1.6 | 11.6 | 3.1 | 77.6 | 6.1 |
| 1.3 | 2.9 | 1.8 | 65.4 | 68.1 | 66.3 | 3.1 | 4.3 | 3.8 | 2.9 | 11.3 | 2.1 | 79.1 | 4.6 |
| 0.9 | 4.8 | 2.2 | 65.4 | 75.7 | 70.4 | 3.1 | 7.5 | 5.0 | 1.7 | 11.5 | 2.6 | 78.6 | 5.6 |
| 0.8 | 1.5 | 1.2 | 65.0 | 72.3 | 68.6 | 3.9 | 5.7 | 4.6 | 1.5 | 11.8 | 1.3 | 80.0 | 5.4 |
| 1.1 | 2.5 | 1.9 | 66.5 | 74.2 | 69.8 | 3.4 | 5.9 | 4.7 | 1.6 | 12.4 | 2.1 | 78.6 | 5.3 |
| 2.0 | 2.5 | 2.2 | 66.0 | 67.4 | 66.6 | 4.8 | 5.1 | 5.0 | 1.7 | 13.2 | 2.5 | 76.8 | 5.8 |
| 0.8 | 1.3 | 1.1 | 67.6 | 73.3 | 70.2 | 4.7 | 7.1 | 5.5 | 1.7 | 12.8 | 1.2 | 78.2 | 6.1 |
| 0.7 | 2.9 | 1.7 | 65.0 | 76.7 | 70.1 | 3.4 | 7.1 | 5.0 | 1.7 | 11.8 | 1.9 | 79.0 | 5.6 |
| 1.6 | 2.6 | 2.1 | 65.5 | 68.9 | 67.0 | 3.8 | 9.2 | 7.6 | 2.0 | 14.0 | 2.3 | 73.4 | 8.3 |
| 3.0 | 5.2 | 3.7 | 62.5 | 69.1 | 66.6 | 7.8 | 11.9 | 9.0 | 2.2 | 11.6 | 4.0 | 72.4 | 9.8 |
| 1.5 | 5.2 | 2.8 | 61.8 | 72.4 | 66.8 | 3.8 | 11.9 | 8.1 | 2.1 | 12.8 | 3.1 | 73.2 | 8.8 |
| 1.2 | 2.3 | 1.8 | 68.4 | 71.1 | 69.6 | 4.2 | 6.0 | 5.2 | 1.7 | 12.5 | 2.0 | 78.0 | 5.8 |
| 1.3 | 3.3 | 2.0 | 66.0 | 75.5 | 70.2 | 5.0 | 5.7 | 5.5 | 1.8 | 12.5 | 2.2 | 77.4 | 6.1 |
| 0.7 | 5.2 | 2.1 | 61.8 | 76.7 | 69.6 | 3.1 | 11.9 | 5.4 | 1.7 | 11.7 | 2.4 | 78.1 | 6.1 |
| 0.9 | 1.8 | 1.2 | 50.3 | 59.4 | 53.9 | 2.9 | 4.0 | 3.5 | 1.3 | 9.6 | 1.8 | 81.9 | 5.4 |
| 0.9 | 1.1 | 1.1 | 33.5 | 54.1 | 49.0 | 1.8 | 4.3 | 3.4 | 1.5 | 11.1 | 2.0 | 80.0 | 5.4 |
| 0.7 | 1.6 | 1.3 | 53.9 | 64.4 | 58.1 | 3.4 | 5.3 | 4.2 | 1.7 | 10.9 | 1.8 | 79.8 | 5.8 |
| 0.3 | 1.0 | 0.8 | 19.9 | 62.5 | 52.4 | 1.4 | 3.0 | 3.6 | 1.3 | 11.9 | 1.2 | 80.6 | 5.0 |
| 1.5 | 8.7 | 2.6 | 59.0 | 73.6 | 70.0 | 2.1 | 4.6 | 3.6 | 2.4 | 10.4 | 3.0 | 80.1 | 4.1 |
| 1.3 | 4.2 | 2.7 | 66.7 | 73.9 | 69.8 | 1.5 | 3.2 | 1.8 | 2.7 | 13.9 | 3.0 | 78.4 | 2.0 |
| 1.5 | 12.9 | 9.5 | 53.5 | 66.9 | 59.7 | 3.4 | 5.8 | 5.0 | 3.4 | 13.2 | 10.8 | 67.0 | 5.6 |
| 1.4 | 2.1 | 1.7 | 71.2 | 73.9 | 72.5 | 1.4 | 2.1 | 1.7 | 2.1 | 12.0 | 1.9 | 82.2 | 1.9 |
| 1.3 | 2.3 | 1.8 | 66.1 | 78.7 | 71.2 | 1.8 | 2.6 | 2.2 | 2.1 | 13.9 | 2.0 | 79.5 | 2.5 |
| 1.3 | 1.9 | 1.6 | 68.5 | 74.4 | 71.8 | 1.6 | 2.7 | 2.2 | 2.2 | 12.8 | 1.8 | 80.7 | 2.5 |
| 1.8 | 2.2 | 2.0 | 70.2 | 74.8 | 72.5 | 1.5 | 1.8 | 1.6 | 2.0 | 12.5 | 2.2 | 81.5 | 1.8 |
| 1.1 | 2.2 | 1.6 | 62.9 | 74.3 | 70.9 | 1.6 | 3.9 | 2.4 | 2.4 | 14.7 | 1.9 | 78.3 | 2.7 |
| 1.4 | 2.0 | 1.7 | 69.6 | 73.8 | 72.6 | 2.1 | 2.7 | 2.3 | 2.1 | 12.8 | 1.9 | 80.7 | 2.5 |
| 1.6 | 2.4 | 2.0 | 69.3 | 71.9 | 70.3 | 1.6 | 2.3 | 1.9 | 1.9 | 14.6 | 2.2 | 79.2 | 2.1 |
| 1.6 | 2.3 | 1.7 | 70.3 | 74.8 | 72.2 | 1.6 | 2.7 | 2.1 | 2.0 | 13.0 | 1.9 | 80.8 | 2.3 |
| 1.1 | 2.4 | 1.8 | 70.6 | 75.9 | 72.1 | 1.3 | 2.5 | 2.0 | 1.9 | 13.0 | 2.0 | 80.9 | 2.2 |
| 1.5 | 2.7 | 2.2 | 70.0 | 75.2 | 72.3 | 1.5 | 2.4 | 2.2 | 2.1 | 12.8 | 2.3 | 80.4 | 2.4 |
| 1.6 | 2.0 | 1.8 | 68.3 | 72.2 | 70.6 | 1.4 | 1.7 | 1.6 | 2.3 | 11.8 | 2.1 | 82.1 | 1.7 |
| 0.4 | 2.9 | 1.8 | 70.9 | 76.6 | 73.9 | 2.0 | 2.5 | 2.3 | 1.8 | 11.5 | 2.0 | 82.1 | 2.6 |
| 1.2 | 1.9 | 1.5 | 74.5 | 77.5 | 76.3 | 1.7 | 2.3 | 2.0 | 1.9 | 9.5 | 1.7 | 84.7 | 2.2 |
| 0.9 | 2.8 | 1.7 | 67.9 | 76.1 | 72.2 | 1.4 | 2.6 | 2.0 | 1.8 | 13.2 | 1.9 | 80.9 | 2.2 |
| 1.5 | 2.9 | 2.0 | 66.7 | 74.4 | 71.3 | 1.7 | 2.3 | 2.1 | 2.1 | 13.9 | 2.2 | 79.5 | 2.3 |
| 1.2 | 2.0 | 1.7 | 69.6 | 73.7 | 71.9 | 1.8 | 2.6 | 2.2 | 1.9 | 13.6 | 1.9 | 80.1 | 2.5 |
| 0.4 | 2.9 | 1.8 | 66.7 | 77.7 | 72.0 | 1.3 | 3.9 | 2.1 | 2.0 | 13.1 | 2.0 | 80.6 | 2.3 |
| 0.4 | 3.1 | 1.8 | 64.8 | 78.6 | 71.9 | 1.3 | 3.9 | 2.1 | 2.0 | 13.3 | 2.0 | 80.4 | 2.3 |
| 0.1 | 0.4 | 0.2 | 77.5 | 80.6 | 79.2 | 0.3 | 0.6 | 0.4 | 0.4 | 8.5 | 0.2 | 90.5 | 0.4 |
| 7.8 | 9.4 | 8.7 | 62.6 | 65.4 | 64.5 | 2.2 | 2.4 | 2.2 | 2.3 | 11.5 | 9.9 | 73.7 | 2.6 |
| 2.5 | 6.1 | 4.8 | 26.2 | 32.8 | 28.8 | 12.3 | 19.0 | 16.9 | 5.3 | 38.1 | 5.4 | 32.2 | 18.9 |
| 3.4 | 5.0 | 4.1 | 50.5 | 62.0 | 55.7 | 1.3 | 1.6 | 1.4 | 3.8 | 24.4 | 4.8 | 65.5 | 1.7 |
| 0.5 | 3.1 | 1.9 | 60.4 | 74.0 | 68.7 | 2.0 | 5.1 | 3.8 | 1.6 | 10.8 | 2.2 | 81.0 | 4.4 |
| 4.7 | 9.4 | 6.6 | 56.8 | 69.7 | 64.8 | 2.5 | 4.7 | 3.5 | 1.7 | 10.0 | 7.8 | 76.4 | 4.1 |
| 0.6 | 1.2 | 0.9 | 66.6 | 69.0 | 67.4 | 6.1 | 8.8 | 7.1 | 2.2 | 15.9 | 1.0 | 73.2 | 7.7 |
| 5.9 | 7.0 | 6.5 | 63.5 | 68.0 | 66.3 | 1.5 | 3.2 | 2.2 | 3.0 | 11.9 | 7.3 | 75.3 | 2.5 |
| 0.4 | 0.5 | 0.4 | 77.6 | 79.1 | 78.3 | 0.8 | 0.9 | 0.8 | 0.8 | 7.7 | 0.5 | 90.1 | 1.0 |
| 0.1 | 1.0 | 0.2 | 71.5 | 78.5 | 75.0 | 0.6 | 1.8 | 1.1 | 0.5 | 12.3 | 0.2 | 85.8 | 1.2 |
| 1.8 | 2.0 | 1.9 | 69.8 | 70.0 | 69.8 | 1.7 | 1.9 | 1.7 | 2.0 | 13.4 | 2.2 | 80.4 | 2.0 |
| 0.2 | 0.5 | 0.3 | 71.1 | 79.4 | 75.8 | 0.7 | 1.8 | 1.4 | 1.2 | 8.0 | 0.4 | 88.8 | 1.6 |

## AVERAGE COMPOSITION OF AMERICAN FEEDING

| | Number of analyses. | In fresh or air-dry material. | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | | | Ash. | | | Protein (N×6.25). | | |
| | | Minimum. | Maximum. | Average. | Minimum. | Maximum. | Average. | Minimum. | Maximum. | Average. |
| MILL PRODUCTS—Continued. | | % | % | % | % | % | % | % | % | % |
| Ground linseed | 2 | 7.9 | 8.3 | **8.1** | 3.4 | 6.1 | **4.7** | 20.3 | 23.0 | **21.6** |
| Pea meal | 2 | 8.9 | 12.1 | **10.5** | 2.6 | 2.7 | **2.6** | 19.1 | 21.4 | **20.2** |
| Ground corn and oats, equal parts | 6 | 10.7 | 13.1 | **11.9** | 1.9 | 2.7 | **2.2** | 8.4 | 10.4 | **9.6** |
| BY-PRODUCTS AND WASTE MATERIALS. | | | | | | | | | | |
| Corn (maize) cob | 18 | 7.2 | 24.8 | **10.7** | 0.7 | 2.7 | **1.4** | 1.2 | 3.7 | **2.4** |
| Hominy chops | 12 | 8.1 | 13.5 | **11.1** | 1.9 | 3.1 | **2.5** | 7.9 | 11.2 | **9.8** |
| Corn (maize) germ | 3 | 9.4 | 13.0 | **10.7** | 1.9 | 7.4 | **4.0** | 9.7 | 9.9 | **9.8** |
| Gluten meal | 32 | 6.4 | 12.3 | **9.6** | 0.1 | 1.7 | **0.7** | 21.3 | 35.5 | **29.4** |
| Starch feed, wet | 12 | 62.3 | 72.2 | **65.4** | 0.1 | 0.6 | **0.3** | 3.6 | 9.6 | **6.1** |
| Oat feed | 4 | 6.4 | 9.2 | **7.7** | 3.2 | 4.2 | **3.7** | 12.6 | 20.0 | **16.0** |
| Barley screenings | 2 | 12.0 | 12.4 | **12.2** | 3.5 | 3.6 | **3.6** | 12.1 | 12.5 | **12.3** |
| Malt sprouts | 4 | 7.3 | 12.0 | **10.2** | 3.8 | 6.7 | **5.7** | 21.0 | 25.9 | **23.2** |
| Brewers' grains, wet | 15 | 68.6 | 79.4 | **75.7** | 0.3 | 1.5 | **1.0** | 4.3 | 6.9 | **5.4** |
| Brewers' grains, dried | 3 | 6.2 | 11.9 | **8.2** | 3.3 | 3.8 | **3.6** | 19.3 | 20.3 | **19.9** |
| Rye bran | 7 | 8.2 | 13.7 | **11.6** | 2.9 | 4.5 | **3.6** | 11.5 | 16.8 | **14.7** |
| Wheat bran, from spring wheat | 10 | 7.4 | 13.6 | **11.5** | 4.0 | 6.0 | **5.4** | 14.3 | 18.1 | **16.1** |
| Wheat bran, from winter wheat | 7 | 10.6 | 13.6 | **12.3** | 5.0 | 6.4 | **5.9** | 13.9 | 17.8 | **16.0** |
| Wheat bran, all analyses | 88 | 7.4 | 15.8 | **11.9** | 2.5 | 7.8 | **5.8** | 12.1 | 18.9 | **15.4** |
| Wheat middlings | 32 | 9.2 | 16.0 | **12.1** | 1.4 | 6.3 | **3.3** | 10.1 | 20.0 | **15.6** |
| Wheat shorts | 12 | 4.1 | 15.5 | **11.8** | 2.0 | 6.2 | **4.6** | 11.1 | 19.4 | **14.9** |
| Wheat screenings | 10 | 7.8 | 13.6 | **11.6** | 1.9 | 3.8 | **2.9** | 8.3 | 16.9 | **12.5** |
| Wheat screenings meal | 2 | 7.3 | 12.6 | **10.0** | 2.9 | 3.2 | **3.1** | 6.6 | 9.0 | **7.8** |
| Wheat flour of screenings | 3 | 12.1 | 13.3 | **12.9** | 2.9 | 3.2 | **3.0** | 7.3 | 10.2 | **8.9** |
| Cockle bran | 3 | 10.2 | 11.8 | **11.1** | 3.0 | 3.6 | **3.2** | 9.4 | 11.9 | **10.6** |
| Rice bran | 5 | 8.8 | 10.7 | **9.7** | 8.4 | 12.4 | **10.0** | 10.9 | 13.6 | **12.1** |
| Rice hulls | 3 | 7.7 | 8.5 | **8.2** | 10.5 | 15.1 | **13.2** | 2.9 | 4.7 | **3.6** |
| Rice polish | 4 | 9.0 | 11.2 | **10.0** | 2.8 | 11.3 | **6.7** | 10.9 | 12.9 | **11.7** |
| Buckwheat middlings | 3 | 9.5 | 16.3 | **13.2** | 4.4 | 5.5 | **4.8** | 25.1 | 31.3 | **28.9** |
| Cotton-seed meal | 35 | 5.8 | 18.5 | **8.2** | 5.7 | 8.8 | **7.2** | 23.3 | 50.8 | **42.3** |
| Cotton-seed hulls | 4 | 10.0 | 11.5 | **10.4** | 2.3 | 3.0 | **2.6** | 3.5 | 4.8 | **4.0** |
| Linseed meal, old-process | 21 | 5.6 | 12.4 | **9.2** | 4.6 | 8.2 | **5.7** | 27.7 | 38.2 | **32.9** |
| Linseed meal, new-process | 14 | 6.0 | 13.4 | **10.1** | 5.0 | 6.9 | **5.8** | 27.1 | 38.4 | **33.2** |
| Palm-nut meal | 3 | 6.1 | 10.8 | **8.3** | 3.5 | 4.0 | **3.7** | 13.5 | 16.0 | **14.4** |
| Apple pomace | 7 | 69.9 | 82.5 | **76.7** | 0.2 | 0.8 | **0.5** | 1.0 | 1.7 | **1.4** |

STUFFS; WITH MAXIMA AND MINIMA—Continued.

| In fresh or air-dry material. | | | | | | | | | Calculated to water-free substance. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Crude fiber. | | | Nitrogen-free extract. | | | Fat. | | | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. |
| Minimum. | Maximum. | Average. | Minimum. | Maximum. | Average. | Minimum. | Maximum. | Average. | Average. | Average. | Average. | Average. | Average. |
| % | % | % | % | % | % | % | % | % | % | % | % | % | % |
| 5.0 | 9.6 | 7.3 | 25.5 | 30.2 | 27.9 | 30.3 | 30.5 | 30.4 | 5.1 | 23.4 | 8.1 | 30.4 | 33.0 |
| 11.1 | 17.7 | 14.4 | 50.2 | 52.0 | 51.1 | 0.9 | 1.5 | 1.2 | 2.9 | 22.5 | 16.0 | 57.2 | 1.4 |
| ..... | ..... | ..... | 70.4*a* | 73.7*a* | 71.9*a* | 4.0 | 5.0 | 4.4 | 2.4 | 10.9 | ..... | 81.7* | 5.0 |
| 18.2 | 38.3 | 30.1 | 43.8 | 66.7 | 54.9 | 0.1 | 0.9 | 0.5 | 1.6 | 2.7 | 33.7 | 61.4 | 0.6 |
| 2.5 | 6.7 | 3.8 | 61.0 | 71.1 | 64.5 | 4.5 | 11.2 | 8.3 | 2.8 | 11.0 | 4.3 | 72.6 | 9.3 |
| 1.9 | 5.8 | 4.1 | 61.9 | 67.4 | 64.0 | 5.2 | 11.2 | 7.4 | 4.5 | 11.0 | 4.6 | 71.7 | 8.3 |
| 0.3 | 5.0 | 1.6 | 47.7 | 58.5 | 52.4 | 3.4 | 9.6 | 6.3 | 0.8 | 32.5 | 1.8 | 57.9 | 7.0 |
| 1.6 | 4.4 | 3.1 | 18.7 | 28.9 | 22.0 | 1.3 | 4.4 | 3.1 | 0.8 | 17.7 | 9.0 | 63.6 | 9.1 |
| 3.7 | 12.5 | 6.1 | 56.2 | 63.7 | 59.4 | 6.1 | 7.8 | 7.1 | 4.0 | 17.3 | 6.6 | 64.4 | 7.7 |
| 7.0 | 7.6 | 7.3 | 61.6 | 62.0 | 61.8 | 2.6 | 2.9 | 2.8 | 4.0 | 14.0 | 8.3 | 70.4 | 3.3 |
| 9.3 | 12.0 | 10.7 | 45.5 | 50.3 | 48.5 | 1.1 | 3.0 | 1.7 | 6.3 | 25.8 | 11.8 | 54.2 | 1.9 |
| 3.1 | 5.6 | 3.8 | 9.6 | 15.9 | 12.5 | 0.8 | 2.9 | 1.6 | 3.9 | 22.4 | 15.7 | 51.5 | 6.5 |
| 10.2 | 11.6 | 11.0 | 46.1 | 56.8 | 51.7 | 4.2 | 6.5 | 5.6 | 3.9 | 21.7 | 12.0 | 56.3 | 6.1 |
| 2.5 | 4.1 | 3.5 | 59.8 | 67.6 | 63.8 | 1.8 | 4.9 | 2.8 | 4.1 | 16.6 | 4.0 | 72.1 | 3.2 |
| 5.4 | 10.1 | 8.0 | 51.7 | 58.1 | 54.5 | 3.6 | 5.0 | 4.5 | 6.1 | 18.2 | 9.0 | 61.6 | 5.1 |
| 7.2 | 8.9 | 8.1 | 50.5 | 56.2 | 53.7 | 3.5 | 4.5 | 4.0 | 6.7 | 18.2 | 9.2 | 61.3 | 4.6 |
| 2.4 | 15.5 | 9.0 | 45.5 | 63.2 | 53.9 | 1.5 | 7.0 | 4.0 | 6.6 | 17.4 | 10.2 | 61.3 | 4.5 |
| 1.3 | 12.7 | 4.6 | 53.0 | 70.9 | 60.4 | 2.1 | 5.9 | 4.0 | 3.8 | 17.8 | 5.2 | 68.7 | 4.5 |
| 6.0 | 10.5 | 7.4 | 50.0 | 62.3 | 56.8 | 2.5 | 6.1 | 4.5 | 5.2 | 16.8 | 8.4 | 64.5 | 5.1 |
| 1.7 | 7.5 | 4.9 | 61.0 | 70.4 | 65.1 | 2.7 | 3.3 | 3.0 | 3.3 | 14.1 | 5.5 | 73.7 | 3.4 |
| 5.7 | 6.6 | 6.2 | 68.2 | 71.4 | 69.8 | 2.8 | 3.8 | 3.3 | 3.4 | 8.7 | 6.9 | 77.3 | 3.7 |
| 3.8 | 9.0 | 5.5 | 62.3 | 69.9 | 66.1 | 3.1 | 4.0 | 3.6 | 3.4 | 10.2 | 6.3 | 76.0 | 4.1 |
| 7.6 | 11.0 | 9.2 | 62.4 | 64.4 | 63.5 | 2.1 | 2.8 | 2.5 | 3.6 | 11.9 | 10.3 | 71.4 | 2.8 |
| 2.0 | 17.8 | 9.5 | 41.9 | 62 3 | 49.9 | 5.2 | 10.9 | 8.8 | 11.0 | 13.4 | 10.4 | 55.5 | 9.7 |
| 30.3 | 38.6 | 35.7 | 36.0 | 41.6 | 38.6 | 0.6 | 0.9 | 0.7 | 14.4 | 3.9 | 38.8 | 42.2 | 0.7 |
| 2.4 | 14.5 | 6.3 | 45.5 | 63.3 | 58.0 | 6.5 | 8.0 | 7.3 | 7.4 | 12.9 | 7.0 | 64.6 | 8.1 |
| 2.4 | 5.7 | 4.1 | 36.3 | 52.7 | 41.9 | 5.7 | 8.1 | 7.1 | 5.5 | 33.3 | 4.6 | 48.5 | 8.1 |
| 1.3 | 10.1 | 5.6 | 15.7 | 38.7 | 23.6 | 8.8 | 18.0 | 13.1 | 7.8 | 46.1 | 6.1 | 25.8 | 14.2 |
| 35.8 | 51.4 | 44.4 | 32.0 | 41.2 | 36.6 | 0.8 | 3.8 | 2.0 | 2.9 | 4.5 | 49.5 | 40.9 | 2.2 |
| 4.7 | 13.3 | 8.9 | 28.4 | 41.9 | 35.4 | 5.2 | 11.6 | 7.9 | 6.3 | 36.2 | 9.7 | 39.2 | 8.6 |
| 7.6 | 14.0 | 9.5 | 35.2 | 48.0 | 38.4 | 1.3 | 4.4 | 3.0 | 6.5 | 36.9 | 10.5 | 42.8 | 3.3 |
| 18.8 | 24.0 | 21.4 | 33.8 | 41.7 | 38.9 | 6.4 | 18.7 | 13.3 | 4.1 | 15.7 | 23.4 | 43.4 | 14.5 |
| 2.0 | 5.9 | 3.9 | 12.6 | 21.2 | 16.2 | 0.6 | 2.0 | 1.3 | 2.2 | 5.9 | 16.6 | 69.6 | 5.7 |

*a* Including fiber.

# ANALYSES OF AMERICAN FEEDING STUFFS.

# ANALYSES OF AMERICAN FEEDING STUFFS.

Collated by E. H. Jenkins and A. L. Winton.

Symbols used in the following tables.—The significance of the letters which appear in the following table is as follows:
*a* Albuminoid nitrogen was determined; *b* nitrogen, phosphoric acid, and potash were determined; *c* the ash ingredients were determined; *d* starch was determined; *e* sugar was determined; *h* yield of fresh substance per acre is given in *loc. cit.*; *i* yield of dry substance per acre is given in *loc. cit.*; *j* yield of food ingredients per acre is given in *loc. cit.*; *k* water content is assumed.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **GREEN FODDER.** | | | | | | | | | | | | | |
| | CEREAL GRASSES. | | | | | | | | | | | | | |
| | Corn (maize) fodder, flint varieties: | % | % | % | % | % | % | % | % | % | % | % | | |
| 1 | Waushakum, cut Aug. 18; av. of 5 analyses; kernels just beginning to swell after fertilization.* | 86.05 | 0.66 | 1.42 | 3.82 | 7.73 | 0.32 | 4.7 | 10.2 | 27.3 | 55.5 | 2.3 | N. Y. State Ex. Sta. Rep., 1883, p. 154. | 1 |
| 2 | Waushakum, cut Aug. 25; av. of 5 analyses. | 84.38 | 0.69 | 1.76 | 4.25 | 8.61 | 0.31 | 4.4 | 11.3 | 27.2 | 55.1 | 2.0 | do | 2 |
| 3 | Waushakum, cut Sept. 1; av. of 5 analyses. | 81.81 | 0.79 | 1.92 | 4.44 | 10.68 | 0.36 | 4.3 | 10.6 | 24.4 | 58.8 | 1.9 | do | 3 |
| 4 | Waushakum, cut Sept. 8; av. of 5 analyses. | 77.34 | 0.88 | 2.20 | 4.49 | 14.53 | 0.55 | 3.9 | 9.7 | 19.8 | 64.2 | 2.4 | do | 4 |
| 5 | Waushakum, cut Sept. 15; av. of 5 analyses. | 75.01 | 0.89 | 2.37 | 4.80 | 16.27 | 0.65 | 3.5 | 9.5 | 19.2 | 65.2 | 2.6 | do | 5 |
| 6 | Waushakum, cut Sept. 23; av. of 5 analyses. | 69.67 | 0.91 | 2.72 | 6.12 | 19.69 | 0.89 | 3.0 | 9.0 | 20.2 | 64.9 | 2.9 | do | 6 |
| 7 | Waushakum, cut Aug. 19; av. of 5 analyses. | 79.59 | 0.72 | 1.70 | 4.77 | 12.69 | 0.53 | 3.5 | 8.3 | 23.4 | 62.2 | 2.6 | N. Y. State Ex. Sta. Rep., 1884, p. 331. | 7 |
| 8 | Waushakum, cut Aug. 20; av. of 5 analyses. | 80.62 | 0.68 | 1.54 | 5.09 | 11.46 | 0.61 | 3.5 | 7.9 | 26.3 | 59.2 | 3.1 | do | 8 |
| 9 | Waushakum | 71.50 | 1.13 | 2.49 | 4.77 | 19.49 | 0.65 | 4.0 | 8.7 | 16.7 | 68.3 | 2.3 | Minn. Ex. Sta. Bul. 2, 1888, p. 12 | 9 |
| 10 | Waushakum, well-manured land; rows 3 feet apart; stalks 8½ inches apart; cut for silage when past the milk. *h* | 83.05 | 1.37 | 1.64 | 2.93 | 10.35 | 0.66 | 8.1 | 9.7 | 17.3 | 61.1 | 2.8 | Minn. Ex. Sta. Bul. 7. 1889 | 10 |
| 11 | Clark, cut July 22; plants 3 to 4 feet high | 88.61 | 0.97 | 1.96 | 2.96 | 5.13 | 0.37 | 8.5 | 17.2 | 26.0 | 45.1 | 3.2 | Mass. State Ex. Sta. Rep., 1885, p. 52 | 11 |
| 12 | Clark, cut July 29 | 85.76 | 1.14 | 2.05 | 3.89 | 6.78 | 0.38 | 8.0 | 14.4 | 27.3 | 47.6 | 2.7 | do | 12 |
| 13 | Clark, cut Aug. 5; tasseled | 84.64 | 0.91 | 1.82 | 4.06 | 8.22 | 0.35 | 5.9 | 11.8 | 26.4 | 53.6 | 2.3 | do | 13 |
| 14 | Clark, cut Aug. 13 | 82.08 | 1.02 | 2.01 | 4.32 | 10.19 | 0.38 | 5.7 | 11.2 | 24.1 | 56.9 | 2.1 | do | 14 |
| 15 | Clark, cut Aug. 27 | 81.15 | 0.89 | 1.67 | 4.58 | 11.37 | 0.34 | 4.7 | 8.9 | 24.3 | 60.3 | 1.8 | do | 15 |
| 16 | Clark, cut Sept. 3; kernels beginning to glaze | 76.81 | 0.98 | 2.13 | 4.85 | 14.62 | 0.61 | 4.2 | 9.2 | 20.9 | 63.1 | 2.6 | do | 16 |
| 17 | Clark, unfertilized plats | | | | | | | | | | | | | |
| 18 | Clark, unfertilized plats | 78.50 | 0.84 | 2.96 | 5.53 | 11.54 | 0.63 | 3.9 | 13.8 | 25.7 | 53.7 | 2.9 | Mass. State Ex. Sta. Rep., 1885. p. 48 | 17 |
| 19 | Clark *c* | 70.27 | 1.56 | 2.48 | 7.28 | 17.40 | 1.01 | 5.2 | 8.4 | 24.5 | 58.5 | 3.4 | Mass. State Ex. Sta. Rep., 1887, p. 93 | 18 |
| 20 | Longfellow, well-manured land; rows 3 feet apart; stalks 8½ inches apart; cut in early milk. *h* | 76.80 | 1.05 | 2.04 | 3.67 | 15.92 | 0.52 | 4.5 | 8.8 | 15.8 | 68.7 | 2.2 | Minn. Ex. Sta. Bul. 2, 1888, p. 12 | 19 |
| | | 84.64 | 1.13 | 1.51 | 3.16 | 9.05 | 0.51 | 7.4 | 9.8 | 20.6 | 58.9 | 3.3 | Minn. Ex. Sta. Bul. 7, 1889 | 20 |
| 21 | Canada *h* | 51.50 | 1.57 | 4.03 | 5.44 | 36.31 | 1.15 | 3.2 | 8.3 | 11.2 | 74.9 | 2.4 | Minn. Ex. Sta. Bul. 2, p. 12 | 21 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22 | New England pop; cut Aug. 20 | 87.43 | 0.66 | 0.94 | 4.47 | 6.16 | 0.34 | 5.2 | 7.5 | 35.5 | 49.1 | 2.7 | N. Y. State Ex. Sta. Rep., 1884, p. 331.. | 22 |
| 23 | White Canadian, well-manured land; rows 3 feet apart; stalks 15 inches apart; cut in dough. *h* | 82.63 | 1.25 | 1.75 | 2.92 | 10.45 | 1.00 | 7.1 | 10.1 | 16.8 | 60.2 | 5.8 | Minn. Ex. Sta. Bul. 7, 1889 | 23 |
| 24 | Mercer, well-manured land; rows 3 feet apart; stalks 12 inches apart; cut when past dough. *h* | 79.34 | 1.30 | 1.76 | 4.08 | 12.68 | 0.84 | 6.3 | 8.5 | 19.8 | 61.3 | 4.1 | do | 24 |
| 25 | Compton Early, well-manured land; rows 3 feet apart; stalks 10 inches apart; cut in dough. *h* | 84.95 | 1.12 | 1.40 | 3.04 | 8.93 | 0.56 | 7.5 | 9.3 | 20.1 | 59.3 | 3.8 | do | 25 |
| 26 | Smut Nose, well-manured land; rows 3 feet apart; stalks 7½ inches apart; cut ripe for silage. *h* | 83.72 | 1.34 | 1.45 | 2.76 | 9.94 | 0.79 | 8.2 | 8.9 | 17.0 | 61.0 | 4.9 | do | 26 |
| 27 | Squaw corn; well-manured land; rows 3 feet apart; stalks 7½ inches apart; cut ripe for ears. *h* | 77.16 | 1.25 | 2.07 | 3.57 | 14.86 | 1.09 | 5.5 | 9.1 | 15.6 | 65.1 | 4.7 | do | 27 |
| 28 | Angel of Midnight, well-manured land; rows 3 feet apart; stalks 7 inches apart; cut ripe for ears. *h* | 83.54 | 1.00 | 1.52 | 2.99 | 10.10 | 0.65 | 6.0 | 9.1 | 18.0 | 62.9 | 4.0 | do | 28 |
| 29 | Early Canada, well-manured land; rows 3 feet apart; stalks 7½ inches apart; cut ripe for ears. *h* | 78.33 | 1.55 | 2.06 | 4.23 | 13.07 | 0.76 | 7.1 | 9.5 | 19.5 | 60.4 | 3.5 | do | 29 |
| 30 | King Philip | 63.20 | 1.37 | 3.27 | 4.73 | 26.60 | 0.83 | 3.8 | 8.9 | 12.8 | 72.2 | 2.3 | Minn. Ex. Sta. Bul. 2, 1888, p. 12 | 30 |
| 31 | Fodder | 70.75 | 1.79 | 2.45 | 11.40 | 12.74 | 0.87 | 6.1 | 8.4 | 39.0 | 43.5 | 3.9 | N. Y. State Ex. Sta. Rep., 1886, p. 365 | 31 |
| 32 | White Australian (for analysis of silage from this corn see No. 618). | 80.01 | 1.09 | 0.56 | 4.56 | 13.35 | 0.43 | 5.4 | 2.8 | 22.8 | 66.8 | 2.2 | Rep. of Expts. at Univ. Wis., 1882, p. 85. | 32 |
| 33 | Sanford, frosted, cut next day | 85.77 | 0.93 | 1.44 | 3.14 | 8.12 | 0.60 | 6.5 | 10.1 | 22.1 | 57.1 | 4.2 | Vt. Ex. Sta. Rep., 1888, p. 74 | 33 |
| 34 | Sanford, frosted, cut 5 days after being badly frosted. | 84.07 | 0.81 | 1.40 | 3.98 | 9.16 | 0.58 | 5.1 | 8.8 | 25.1 | 57.4 | 3.6 | do | 34 |
| 35 | Sanford, frosted, cut after a heavy frost | 84.97 | 1.03 | 1.69 | 3.77 | 7.88 | 0.66 | 6.9 | 11.2 | 25.1 | 52.4 | 4.4 | do | 35 |
| 36 | Sanford, cut July 26 *b* | 90.85 | 0.75 | 1.42 | 2.06 | 4.31 | 0.61 | 8.2 | 15.6 | 22.5 | 47.0 | 6.7 | N. H. Ex. Sta. Bul. No. 3, 1888 | 36 |
| 37 | Sanford, cut Aug. 5 *b* | 86.79 | 0.90 | 1.63 | 3.06 | 6.88 | 0.73 | 7.3 | 12.4 | 23.1 | 51.7 | 5.5 | do | 37 |
| 38 | Sanford, cut Aug. 19 *b* | 86.75 | 0.73 | 1.49 | 3.28 | 7.27 | 0.57 | 5.5 | 11.3 | 24.1 | 54.8 | 4.3 | do | 38 |
| 39 | Sanford, cut Sept. 16 *b* | 77.20 | 0.93 | 2.11 | 4.81 | 13.85 | 1.08 | 4.1 | 9.3 | 21.1 | 60.8 | 4.7 | do | 39 |
| 40 | Northern field, cut July 26 *b* | 87.75 | 1.07 | 1.79 | 2.99 | 5.58 | 0.82 | 8.8 | 14.6 | 24.4 | 45.5 | 6.7 | do | 40 |
| 41 | Northern field, cut Aug. 5 *b* | 86.10 | 0.66 | 1.88 | 3.25 | 7.51 | 0.62 | 4.7 | 13.4 | 23.4 | 54.1 | 4.4 | do | 41 |
| 42 | Northern field, cut Aug. 19 *b* | 81.45 | 1.02 | 1.89 | 4.56 | 10.48 | 0.59 | 5.5 | 10.2 | 24.6 | 56.5 | 3.2 | do | 42 |
| 43 | Northern field, cut Sept. 16 *b* | 72.40 | 1.69 | 2.65 | 4.79 | 17.17 | 1.30 | 6.1 | 9.6 | 17.4 | 62.2 | 4.7 | do | 43 |
| | All analyses, excluding Nos. 33–35. Maximum | 90.85 | 1.79 | 4.03 | 11.40 | 36.31 | 1.30 | 8.8 | 17.2 | 39.0 | 72.3 | 6.7 | | |
| | Minimum | 51.50 | 0.66 | 0.56 | 2.06 | 4.31 | 0.31 | 3.0 | 2.8 | 11.2 | 43.5 | 1.8 | | |
| | Average | **79.76** | **1.05** | **1.96** | **4.32** | **12.26** | **0.65** | **5.2** | **9.7** | **21.3** | **60.6** | **3.2** | | |
| | Mature corn fodder, cut after the kernels were glazed, or after September 7.† Maximum | 83.72 | 1.69 | 2.72 | 6.12 | 19.69 | 1.30 | 8.2 | 9.7 | 21.1 | 65.2 | 4.9 | | |
| | Minimum | 69.67 | 0.88 | 1.45 | 2.99 | 9.94 | 0.55 | 3.0 | 8.9 | 15.6 | 60.4 | 2.4 | | |
| | Average | **77.12** | **1.14** | **2.13** | **4.34** | **14.43** | **0.84** | **5.0** | **9.2** | **18.9** | **63.2** | **3.7** | | |

* The separate analyses are given in *loc. cit.*, together with height and weight of stalk.

†Nos. 4, 5, 6, 26, 27, 28, 29, 39, and 43.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GREEN FODDER—Continued. | | | | | | | | | | | | | |
| | CEREAL GRASSES—continued. | | | | | | | | | | | | | |
| | Corn (maize) fodder, dent varieties: | % | % | % | % | % | % | % | % | % | % | % | | |
| 44 | Southern White, cut Aug. 23, when tassels began to appear; thin sown. *h* | 88.09 | 0.78 | 1.06 | 3.83 | 6.06 | 0.18 | 6.6 | 8.9 | 32.2 | 50.9 | 1.4 | Conn. State (Middletown) Ex. Sta. Rep., 1877–'78, p. 36. | 44 |
| 45 | Southern White, cut Aug. 23, when tassels began to appear; thick sown. *h* | 93.60 | 0.55 | 0.54 | 2.22 | 3.01 | 0.08 | 8.6 | 8.4 | 34.7 | 47.0 | 1.3 | do | 45 |
| 46 | Southern White, cut Sept. 7; thick sown *h* | 63.53 | 2.54 | 3.79 | 11.00 | 18.78 | 0.36 | 6.9 | 10.4 | 30.2 | 51.5 | 1.0 | do | 46 |
| 47 | Green fodder corn | 74.85 | 1.46 | 1.25 | 6.35 | 15.67 | 0.42 | 5.8 | 5.0 | 25.2 | 62.3 | 1.7 | N. J. Ex. Sta. Rep., 1881, p. 52 | 47 |
| 48 | Do | 71.10 | 1.35 | 1.56 | 7.88 | 17.69 | 0.42 | 4.7 | 5.4 | 27.3 | 61.1 | 1.5 | do | 48 |
| 49 | Do | 75.04 | 1.51 | 1.75 | 9.78 | 11.37 | 0.55 | 6.0 | 7.0 | 39.2 | 45.6 | 2.2 | do | 49 |
| 50 | Do | 74.43 | 1.65 | 1.72 | 6.32 | 15.65 | 0.23 | 6.5 | 6.7 | 24.7 | 61.2 | 0.9 | N. J. Ex. Sta. Rep., 1882, p. 71 | 50 |
| 51 | Do | 73.12 | 1.70 | 1.70 | 6.56 | 16.63 | 0.29 | 6.3 | 6.3 | 24.4 | 61.9 | 1.1 | do | 51 |
| 52 | Green field corn, planted in hills as for crop of ears. Analysis No. 614 is silage made from this crop. | 79.72 | 1.07 | 1.78 | 4.73 | 12.46 | 0.24 | 5.3 | 8.8 | 23.3 | 61.4 | 1.2 | Conn. State Ex. Sta. Rep., 1882, p. 100 | 52 |
| 53 | Green fodder corn, thickly planted in drills. Analysis No. 615 is silage made from this crop. | 87.15 | 0.87 | 1.54 | 4.19 | 6.06 | 0.19 | 6.8 | 11.9 | 32.6 | 47.2 | 1.5 | do | 53 |
| 54 | Yellow dent. Analysis No. 619 is silage made from this crop. | 84.95 | 0.78 | 1.15 | 3.29 | 9.32 | 0.51 | 5.2 | 7.6 | 21.9 | 61.9 | 3.4 | Rep. of Expts. at Univ. Wis., 1882, p. 85. | 54 |
| 55 | Green fodder corn | 71.51 | 1.42 | 1.45 | 6.77 | 18.50 | 0.35 | 5.0 | 5.1 | 23.8 | 64.9 | 1.2 | N. J. Ex. Sta. Rep., 1883, p. 75 | 55 |
| 56 | Do | 69.11 | 1.56 | 1.59 | 8.12 | 19.30 | 0.32 | 5.1 | 5.1 | 26.3 | 62.5 | 1.0 | do | 56 |
| 57 | Silage corn, Southern White | 80.00 | 1.10 | 1.21 | 6.49 | 10.71 | 0.49 | 5.5 | 6.0 | 32.5 | 53.5 | 2.5 | N. Y. State Ex. Sta. Rep., 1884, p. 331 | 57 |
| 58 | Minnesota, cut Aug. 21, 1884 | 82.21 | 0.84 | 1.83 | 6.37 | 8.32 | 0.43 | 4.7 | 10.3 | 35.8 | 46.8 | 2.4 | do | 58 |
| 59 | Husk corn, cut Aug. 22, 1883 | 82.15 | 1.09 | 1.45 | 5.59 | 9.20 | 0.52 | 6.1 | 8.1 | 31.3 | 51.6 | 2.9 | do | 59 |
| 60 | Husk corn, cut Aug. 9 | 81.97 | 0.87 | 1.52 | 5.34 | 9.49 | 0.81 | 4.8 | 8.4 | 29.6 | 52.6 | 4.5 | do | 60 |
| 61 | Silage corn, Southern White, cut Sept. 5 | 81.46 | 1.16 | 1.02 | 5.93 | 9.73 | 0.70 | 6.3 | 5.5 | 32.0 | 52.5 | 3.7 | do | 61 |
| 62 | Green corn | 86.71 | 1.55 | 2.15 | 3.50 | 5.84 | 0.25 | 11.7 | 16.2 | 26.3 | 43.9 | 1.9 | N. J. Ex. Sta. Rep., 1884, p. 106 | 62 |
| 63 | Do | 80.91 | 1.35 | 2.15 | 5.00 | 10.20 | 0.39 | 7.1 | 11.3 | 26.2 | 53.4 | 2.0 | do | 63 |
| 64 | Do | 77.76 | 1.45 | 1.76 | 5.78 | 12.85 | 0.40 | 6.5 | 7.9 | 26.0 | 57.8 | 1.8 | do | 64 |
| 65 | Do | 73.79 | 1.43 | 1.86 | 6.20 | 16.28 | 0.44 | 5.5 | 7.1 | 23.7 | 62.0 | 1.7 | do | 65 |
| 66 | Green corn, cut Aug. 2; height 5 ft.; drills 3 ft. apart. *a h* | 89.36 | 1.19 | 0.89 | 3.45 | 4.89 | 0.22 | 11.2 | 8.4 | 32.5 | 45.9 | 2.0 | Penn. Ex. Sta. Rep., 1887, p. 124 | 66 |
| 67 | Green corn, cut Aug 23; height 6 ft.; drills 3 ft. apart. *a h* | 83.61 | 1.16 | 0.96 | 5.54 | 8.41 | 0.32 | 7.1 | 5.9 | 33.8 | 53.3 | 1.9 | do | 67 |
| 68 | Green corn, cut Sept. 13; mature; drills 3 ft. apart. *a h* | 80.65 | 1.03 | 0.98 | 5.35 | 11.63 | 0.36 | 5.4 | 5.1 | 27.7 | 60.0 | 1.8 | do | 68 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 69 | Green corn, sown later and more manure used than in the last 3 samples; height 6 ft.; drills 3 ft. apart. *a h* | 85.25 | 1.01 | 1.29 | 4.46 | 7.63 | 0.36 | 6.8 | 8.8 | 30.2 | 51.7 | 2.5 | ....do | 69 |
| 70 | Minnesota White | 73.90 | 0.88 | 1.99 | 4.99 | 17.76 | 0.48 | 3.4 | 7.6 | 19.1 | 68.1 | 1.8 | Minn. Ex. Sta. Bul. 2, 1888 | 70 |
| 71 | Minnesota Yellow | 62.90 | 1.09 | 2.89 | 10.41 | 22.08 | 0.63 | 2.9 | 7.8 | 28.1 | 59.5 | 1.7 | ....do | 71 |
| 72 | Dakota Dent | 71.50 | 0.84 | 2.53 | 4.20 | 20.25 | 0.68 | 2.9 | 8.9 | 14.7 | 71.1 | 2.4 | ....do | 72 |
| 73 | Pride of the North | 73.10 | 1.00 | 1.99 | 4.91 | 18.56 | 0.44 | 3.7 | 7.4 | 18.3 | 69.0 | 1.6 | ....do | 73 |
| 74 | Leaming | 78.20 | 0.82 | 1.72 | 4.36 | 14.54 | 0.36 | 3.8 | 7.9 | 20.0 | 66.6 | 1.7 | ....do | 74 |
| 75 | Suedley | 78.10 | 0.72 | 1.77 | 4.20 | 14.85 | 0.36 | 3.3 | 8.1 | 19.2 | 67.8 | 1.6 | ....do | 75 |
| 76 | Sheep-Tooth | 86.60 | 0.48 | 1.05 | 3.67 | 8.04 | 0.16 | 3.5 | 7.8 | 27.4 | 60.1 | 1.2 | ....do | 76 |
| 77 | Southern Ensilage No. 1 | 83.40 | 0.61 | 1.20 | 3.76 | 10.89 | 0.14 | 3.6 | 7.2 | 22.7 | 65.7 | 0.8 | ....do | 77 |
| 78 | Southern Ensilage No. 2 *b h i j* | 79.40 | 1.25 | 1.44 | 5.46 | 12.29 | 0.16 | 6.1 | 7.0 | 26.5 | 59.6 | 0.8 | ....do | 78 |
| 79 | Southern Ensilage, cut Sept. 16 *b h i j* | 75.40 | 1.13 | 2.36 | 5.95 | 14.58 | 0.58 | 4.6 | 9.6 | 24.2 | 59.3 | 2.3 | N. H. Ex. Sta. Bul. 1, 1888 | 79 |
| 80 | Pride of the North, cut Sept. 16 | 70.45 | 1.77 | 3.25 | 6.04 | 16.90 | 1.59 | 6.0 | 11.0 | 20.4 | 57.2 | 5.4 | ....do | 80 |
| 81 | Pride of the North, well matured *a h* | 71.00 | 2.22 | 2.49 | 7.82 | 15.98 | 0.49 | 7.7 | 8.6 | 26.9 | 55.1 | 1.7 | Wis. Ex. Sta. Rep., 1888, pp. 8 and 85 | 81 |
| 82 | Burrill & Whitman Southern Ensilage; planted 6 to 8 inches apart; drills 3 feet 10 inches apart; cut Aug. 15; stalks in tassel, but ears just coming into milk. *a* | 82.30 | 1.59 | 1.81 | 6.80 | 7.22 | 0.28 | 9.0 | 10.2 | 38.4 | 40.8 | 1.6 | ....do | 82 |
| 83 | Burrill & Whitman Southern Ensilage, cut Aug. 31. | 74.31 | 1.39 | 1.76 | 6.60 | 15.22 | 0.72 | 5.4 | 6.8 | 25.7 | 59.3 | 2.8 | ....do | 83 |
| 84 | Breck Ensilage corn; rows 3 feet apart; drilled 20 quarts seed per acre; cut when glazed. *a h i j* | 78.75 | 1.21 | 1.07 | 7.62 | 10.14 | 1.21 | 5.7 | 5.0 | 35.9 | 47.7 | 5.7 | Md. Ex. Sta. Bul. 3, 1888 | 84 |
| 85 | Breck Ensilage corn; rows 18 inches apart; drilled 36 quarts seed per acre; cut before glazing. *a h i j* | 80.18 | 0.94 | 1.02 | 6.22 | 10.54 | 1.10 | 4.7 | 5.1 | 31.4 | 53.2 | 5.6 | ....do | 85 |
| 86 | Breck Ensilage corn; rows 9 inches apart; drilled 52 quarts seed per acre; cut before glazing. *a h i j* | 79.67 | 1.04 | 1.13 | 7.20 | 9.87 | 1.09 | 5.1 | 5.6 | 35.4 | 48.5 | 5.4 | ....do | 86 |
| 87 | Breck Ensilage corn; broadcast; drilled 52 quarts seed per acre; cut before glazing. *a h i j* | 77.93 | 1.09 | 1.83 | 7.85 | 10.48 | 0.82 | 4.9 | 8.3 | 35.6 | 47.5 | 3.7 | ....do | 87 |
| 88 | Rose Dent, well-manured land; rows 3 feet apart; stalks 2 to the foot; cut in milk. *h* | 78.50 | 1.53 | 1.67 | 3.51 | 14.01 | 0.78 | 7.1 | 7.8 | 16.3 | 65.2 | 3.6 | Minn. Ex. Sta. Bul. 7, 1889 | 88 |
| 89 | Burr White Dent; rows 3 feet 8 inches apart; 1 to 3 kernels every 8 inches; kernels glazed; leaves dry at bottom. *a h* | 59.54 | 1.76 | 1.93 | 8.46 | 27.04 | 1.27 | 4.5 | 4.2 | 24.6 | 63.9 | 2.8 | Ill. Ex. Sta. Bul. 4, 1889 | 89 |
| 90 | Burrill & Whitman Ensilage; rows 3 feet 8 inches apart; 1 kernel every 3 inches; kernels in milk; leaves green. *a h* | 72.66 | 1.22 | 1.47 | 6.44 | 17.36 | 0.85 | 4.4 | 4.8 | 24.5 | 63.3 | 3.0 | ....do | 90 |
| 91 | Burrill & Whitman Ensilage; rows 3 feet 9 inches apart; stalks 10 inches apart; cut Aug. 25. *a* | 82.75 | 2.12 | 2.75 | 8.49 | 3.27 | 0.62 | 7.8 | 10.1 | 31.1 | 48.7 | 2.3 | Mich. Ex. Sta., Bul. 49, 1889 | 91 |
| 92 | Burrill & Whitman Ensilage; rows 3 feet 9 inches apart; stalks 10 inches apart; cut Sept. 3. *a* | 78.30 | 1.34 | 2.36 | 5.91 | 11.54 | 0.55 | 6.2 | 10.9 | 27.2 | 53.2 | 2.5 | ....do | 92 |
| 93 | Burrill & Whitman Ensilage; rows 3 feet 9 inches apart; stalks 10 inches apart; cut Sept. 10. *a* | 78.02 | 1.23 | 2.02 | 6.26 | 12.00 | 0.47 | 5.6 | 9.2 | 28.5 | 54.6 | 2.1 | ....do | 93 |

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GREEN FODDER—Continued. | | | | | | | | | | | | | |
| | CEREAL GRASSES—continued. | | | | | | | | | | | | | |
| | Corn (maize) fodder, dent varieties—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 94 | Burrill & Whitman Ensilage; rows 3 feet 9 inches apart; stalks 10 inches apart; cut Sept. 13. *a* | 78.04 | 1.03 | 1.82 | 5.87 | 12.74 | 0.50 | 4.6 | 8.3 | 26.8 | 58.1 | 2.2 | Mich. Ex. Sta. Bul. 49, 1889 | 94 |
| 95 | Hathaway Dent; ears glazing; cut Sept. 3 to 5. *a* | 73.56 | 0.84 | 2.28 | 5.14 | 17.59 | 0.55 | 3.2 | 8.6 | 19.5 | 66.6 | 2.1 | do | 95 |
| 96 | Parish White Dent, cut Sept. 3 to 5 *a* | 75.54 | 1.54 | 1.87 | 6.17 | 14.50 | 0.38 | 6.3 | 7.6 | 25.2 | 59.2 | 1.7 | do | 96 |
| 97 | Leaming, cut Sept. 3 to 5 *a* | 76.77 | 1.35 | 1.53 | 5.64 | 14.36 | 0.35 | 5.9 | 6.5 | 24.3 | 61.7 | 1.6 | do | 97 |
| 98 | Burrill & Whitman Ensilage, cut Aug. 25; wilted for 2 days. *a* | 88.00 | 0.78 | 1.07 | 3.34 | 6.51 | 0.30 | 6.5 | 8.9 | 27.9 | 54.2 | 2.5 | do | 98 |
| 99 | Burrill & Whitman Ensilage, cut Sept. 1; wilted for 2 days. *a* | 72.40 | 1.65 | 2.54 | 7.93 | 14.84 | 0.64 | 6.0 | 9.2 | 28.7 | 53.8 | 2.3 | do | 99 |
| 100 | Burrill & Whitman Ensilage, cut Sept. 8; wilted for 2 days. *a* | 73.00 | 1.50 | 2.42 | 7.72 | 14.75 | 0.61 | 5.5 | 9.0 | 28.6 | 54.6 | 2.3 | do | 100 |
| 101 | Leaming, cut Oct. 1, after heavy frost | 85.15 | 1.35 | 1.85 | 4.02 | 7.09 | 0.54 | 9.1 | 12.5 | 27.1 | 47.7 | 3.6 | Vt. Ex. Sta. Rep., 1888, p. 74 | 101 |
| 102 | Red Cob Ensilage, cut Oct. 1, after heavy frost. | 86.23 | 0.98 | 1.63 | 4.42 | 6.24 | 0.50 | 7.1 | 11.8 | 32.1 | 45.3 | 3.7 | do | 102 |
| 103 | Southern White, cut Oct. 2, after being frozen. | 84.28 | 1.23 | 1.19 | 3.74 | 9.01 | 0.55 | 7.8 | 7.6 | 23.8 | 57.3 | 3.5 | do | 103 |
| 104 | Southern Ensilage, cut July 26 *b h i j* | 91.25 | 0.79 | 1.60 | 2.03 | 3.99 | 0.34 | 9.0 | 18.2 | 23.2 | 45.7 | 3.9 | N. H. Ex. Sta. Bul. 3, 1888 | 104 |
| 105 | Southern Ensilage, cut Aug. 5 *b h i j* | 89.19 | 0.93 | 1.52 | 3.05 | 4.81 | 0.51 | 8.6 | 14.1 | 28.2 | 44.4 | 4.7 | do | 105 |
| 106 | Southern Ensilage, cut Aug. 19 *b h i j* | 84.95 | 1.04 | 2.25 | 3.90 | 7.11 | 0.75 | 6.9 | 15.0 | 25.9 | 47.2 | 5.0 | do | 106 |
| 107 | Pride of the North, cut July 26 *b h i j* | 90.65 | 0.99 | 1.63 | 2.29 | 4.00 | 0.44 | 10.6 | 17.5 | 24.6 | 42.6 | 4.7 | do | 107 |
| 108 | Pride of the North, cut Aug. 5 *b h i j* | 87.56 | 1.02 | 1.97 | 3.35 | 5.55 | 0.56 | 8.2 | 15.8 | 26.9 | 44.6 | 4.5 | do | 108 |
| 109 | Pride of the North, cut Aug. 19 *b h i j* | 82.25 | 0.90 | 1.92 | 3.97 | 10.27 | 0.67 | 5.1 | 10.8 | 22.3 | 57.9 | 3.9 | do | 109 |
| 110 | Immature, cut for soiling *a* | 90.04 | 1.22 | 1.72 | 2.70 | 3.92 | 0.40 | 12.3 | 17.3 | 27.1 | 39.4 | 3.9 | Pa. Ex. Sta. Rep., 1888, p. 89 | 110 |
| | Dent varieties, excluding Nos. 98–103. Maximum | 93.60 | 2.54 | 3.79 | 11.00 | 27.04 | 1.59 | 12.3 | 18.2 | 39.2 | 69.0 | 5.7 | | |
| | Minimum | 59.54 | 0.55 | 0.54 | 2.03 | 3.01 | 0.08 | 2.9 | 4.2 | 14.7 | 39.4 | 0.8 | | |
| | Average | **78.99** | **1.20** | **1.73** | **5.59** | **11.98** | **0.51** | **5.7** | **8.3** | **26.3** | **57.1** | **2.6** | | |
| | Dent varieties, cut when glazed or more mature; 7 analyses.† Maximum | 80.65 | 2.22 | 3.25 | 8.46 | 27.04 | 1.59 | 7.7 | 11.0 | 35.9 | 63.9 | 5.7 | | |
| | Minimum | 59.54 | 1.03 | 0.98 | 5.35 | 11.63 | 0.36 | 4.5 | 4.2 | 20.4 | 47.7 | 1.7 | | |
| | Average | **73.40** | **1.45** | **1.99** | **6.70** | **15.60** | **0.86** | **5.4** | **7.5** | **25.2** | **58.7** | **3.2** | | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 111 | Corn (maize) fodder, sweet varieties: | | | | | | | | | | | | | |
| | Medium or large variety, planted June 1; hills 2⅔ feet apart, rows 3 feet apart; cut July 25, before tassels appeared.* | 92.91 | 0.98 | 0.87 | 1.90 | 3.20 | 0.14 | 13.8 | 12.2 | 26.8 | 45.2 | 2.0 | Conn. State Ex. Sta. Rep., 1878, p. 60 | 111 |
| 112 | Medium or large variety, planted June 1; hills 2⅔ feet apart, rows 3 feet apart; cut Aug. 9, in full silk.* | 88.29 | 1.27 | 1.31 | 3.23 | 5.73 | 0.17 | 10.8 | 11.2 | 27.5 | 49.1 | 1.4 | do | 112 |
| 113 | Medium or large variety, planted June 1; hills 2⅔ feet apart, rows 3 feet apart; cut Aug. 25; kernels full size for eating as green corn.* | 90.48 | 1.10 | 0.87 | 2.69 | 4.72 | 0.14 | 11.5 | 9.1 | 28.3 | 49.6 | 1.5 | do | 113 |
| 114 | Medium or large variety, planted June 1; hills 2⅔ feet apart, rows 3 feet apart; cut Sept. 25; stalks and ears nearly dry.* | 80.74 | 2.33 | 1.54 | 5.94 | 9.21 | 0.24 | 12.1 | 7.9 | 30.8 | 47.9 | 1.3 | do | 114 |
| 115 | Stowell Evergreen, cut Aug. 20 | 80.48 | 1.00 | 1.72 | 6.14 | 10.14 | 0.52 | 5.1 | 8.8 | 31.4 | 52.0 | 2.7 | N. Y. State Ex. Sta. Rep., 1884, p. 331 | 115 |
| 116 | Narragansett | 74.00 | 0.99 | 2.10 | 3.40 | 18.94 | 0.57 | 3.8 | 8.1 | 13.1 | 72.9 | 2.1 | Minn. Ex. Sta. Bul. 2, 1888 | 116 |
| 117 | Early Minnesota | 76.20 | 0.94 | 2.11 | 3.65 | 16.54 | 0.56 | 3.9 | 8.9 | 15.3 | 69.5 | 2.4 | do | 117 |
| 118 | Black Mexican | 71.90 | 1.14 | 2.60 | 4.58 | 19.07 | 0.71 | 4.1 | 9.2 | 16.3 | 67.9 | 2.5 | do | 118 |
| 119 | Crosby Early No. 1 | 73.90 | 0.92 | 2.23 | 3.89 | 18.55 | 0.51 | 3.5 | 8.5 | 14.9 | 71.1 | 2.0 | do | 119 |
| 120 | Marblehead | 69.30 | 1.82 | 2.74 | 5.72 | 19.64 | 0.78 | 5.9 | 8.9 | 18.6 | 64.1 | 2.5 | do | 120 |
| 121 | Old Colony Sugar | 79.30 | 0.94 | 1.86 | 3.81 | 13.60 | 0.49 | 4.5 | 9.0 | 18.4 | 65.8 | 2.3 | do | 121 |
| 122 | Moore Concord | 72.80 | 1.09 | 2.41 | 3.64 | 19.39 | 0.67 | 4.0 | 8.9 | 13.4 | 71.2 | 2.5 | do | 122 |
| 123 | Stowell Evergreen | 80.80 | 0.76 | 1.52 | 3.68 | 13.12 | 0.12 | 4.0 | 7.9 | 19.2 | 68.3 | 0.6 | do | 123 |
| 124 | Mammoth Sugar | 83.40 | 0.75 | 1.37 | 2.02 | 12.09 | 0.37 | 4.5 | 8.3 | 12.2 | 72.8 | 2.2 | do | 124 |
| 125 | Early Minnesota No. 2 | 78.10 | 0.98 | 1.92 | 3.47 | 15.03 | 0.50 | 4.5 | 8.8 | 15.8 | 68.6 | 2.3 | do | 125 |
| 126 | Crosby Early No. 2 | 78.90 | 1.22 | 1.94 | 3.69 | 13.69 | 0.56 | 5.8 | 9.2 | 17.5 | 64.9 | 2.6 | do | 126 |
| 127 | Perry Hybrid | 79.80 | 0.98 | 1.76 | 3.68 | 13.33 | 0.45 | 4.8 | 8.7 | 18.2 | 66.1 | 2.2 | do | 127 |
| 128 | Stowell Evergreen (large sweet), rows 3 feet 10 inches apart; stalks 4 feet 6 inches apart; when cut ears had set. *h j* | 77.35 | 2.04 | 2.12 | 7.67 | 10.37 | 0.45 | 9.0 | 9.4 | 33.9 | 45.7 | 2.0 | Wis. Ex. Sta. Rep., 1888, p. 9 | 128 |
| 129 | Stowell Evergreen (large sweet), cut Aug. 15. *a* | 80.19 | 1.77 | 2.04 | 6.81 | 8.85 | 0.34 | 8.9 | 10.3 | 34.4 | 44.7 | 1.7 | Wis. Ex. Sta. Rep. 1888, p. 85 | 129 |
| 130 | Stowell Evergreen (large sweet), cut Aug. 18 *a* | 74.25 | 2.35 | 2.16 | 8.52 | 12.14 | 0.58 | 9.2 | 8.4 | 33.4 | 46.7 | 2.3 | do | 130 |
| 131 | Stowell Evergreen (large sweet), cut Aug. 18; same crop as No. 130, but left shocked in field one week; partly cured. *a* | 66.44 | 2.58 | 2.74 | 11.53 | 16.02 | 0.69 | 7.7 | 8.2 | 34.4 | 47.7 | 2.0 | do | 131 |
| 132 | Variety unknown | 77.51 | 1.12 | 1.75 | 4.58 | 14.03 | 1.01 | 5.0 | 7.8 | 20.4 | 62.3 | 4.5 | Mo. Ex. Sta. Bul. 7, 1889 | 132 |
| 133 | Stowell Evergreen, cut Oct. 1, after heavy frost. | 85.60 | 1.41 | 1.52 | 3.45 | 7.42 | 0.60 | 9.8 | 10.6 | 23.9 | 51.5 | 4.2 | Vt. Ex. Sta. Rep., 1888, p. 74 | 133 |
| | Sweet varieties, excluding Nos. 131–133. Maximum | 92.91 | 2.58 | 2.74 | 8.52 | 19.39 | 1.01 | 13.8 | 12.2 | 34.4 | 72.9 | 2.7 | | |
| | Sweet varieties, excluding Nos. 131–133. Minimum | 69.30 | 0.75 | 0.87 | 1.90 | 3.20 | 0.14 | 3.5 | 7.8 | 13.1 | 44.7 | 0.6 | | |
| | Sweet varieties, excluding Nos. 131–133. Average | **79.08** | **1.26** | **1.86** | **4.42** | **12.92** | **0.46** | **6.0** | **8.9** | **21.2** | **61.7** | **2.2** | | |
| | Corn (maize) fodder, unclassified varieties: | | | | | | | | | | | | | |
| 134 | Fodder *a* | 80.24 | 0.85 | 2.07 | 5.69 | 10.56 | 0.59 | 4.3 | 10.5 | 28.8 | 53.9 | 2.5 | N. Y. State Ex. Sta. Rep., 1888, p. 237 | 134 |
| 135 | Fresh corn | 87.15 | 0.87 | 1.54 | 4.19 | 6.06 | 0.19 | 6.8 | 12.0 | 32.6 | 47.1 | 1.5 | Ala. College Ex. Sta. Bul. 3, 1884 | 135 |
| 136 | Dent and flint mixed, cut Aug. 22; partly cured. *a* | 65.65 | 2.72 | 3.01 | 11.74 | 16.38 | 0.50 | 7.9 | 8.8 | 34.2 | 47.7 | 1.4 | Wis. Ex. Sta. Rep., 1888, p. 85 | 136 |

* On page 62, *loc. cit.*, are determinations of nitrogen as nitrates in the crop.

† Nos. 68, 79, 80, 81, 84, 89, 94.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GREEN FODDER—Continued. | | | | | | | | | | | | | |
| | CEREAL GRASSES—continued. | | | | | | | | | | | | | |
| | Corn (maize) fodder, unclassified varieties—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 137 | Field corn | 75.06 | 1.22 | 2.13 | 6.73 | 14.21 | 0.65 | 4.9 | 8.5 | 27.0 | 57.0 | 2.6 | Mo. Ex. Sta. Bul. 7, 1889 | 137 |
| 138 | Fodder | 83.31 | 1.31 | 1.19 | 4.67 | 9.05 | 0.47 | 7.9 | 7.1 | 27.9 | 54.3 | 2.8 | Miss. Ex. Sta. Bul. 8, 1889 | 138 |
| 139 | Slightly frosted *a* | 86.00 | 0.78 | 1.04 | 3.78 | 7.66 | 0.74 | 5.5 | 7.4 | 27.0 | 54.8 | 5.3 | Md. Ex. Sta. Rep., 1888, p. 69 | 139 |
| 140 | Severely frosted *a* | 77.53 | 1.18 | 1.19 | 7.03 | 12.37 | 0.70 | 5.3 | 5.3 | 31.8 | 54.5 | 3.1 | ....do | 140 |
| 141 | Frosted *a* | 76.90 | 1.27 | 1.59 | 6.10 | 13.06 | 1.08 | 5.5 | 6.9 | 26.4 | 56.6 | 4.6 | ....do | 141 |
| | All varieties, 126 analyses of corn (maize) fodder. Maximum | 93.60 | 2.58 | 4.03 | 11.40 | 36.31 | 1.59 | 13.8 | 18.2 | 39.2 | 72.9 | 6.7 | | |
| | Minimum | 51.50 | 0.55 | 0.54 | 1.90 | 3.01 | 0.08 | 2.9 | 2.8 | 11.2 | 39.4 | 0.6 | | |
| | Average | **79.33** | **1.16** | **1.82** | **4.98** | **12.17** | **0.54** | **5.6** | **8.8** | **24.1** | **58.9** | **2.6** | | |
| | Corn (maize) fodder, leaves and husks, dent varieties: | | | | | | | | | | | | | |
| 142 | Burrill & Whitman Ensilage; rows 3 feet 8 inches apart; 1 to 3 stalks every 8 inches; leaves 4 to 5 at bottom dry. *a* | 65.11 | 2.86 | 2.36 | 8.38 | 19.94 | 1.33 | 8.2 | 6.8 | 24.0 | 57.2 | 3.8 | Ill. Ex. Sta. Bul. 4, 1889 | 142 |
| 143 | Burrill & Whitman Ensilage; rows 3 feet, 8 inches apart; 1 stalk every 4 inches; leaves green. *a* | 70.73 | 2.18 | 1.80 | 7.26 | 17.09 | 0.95 | 7.5 | 5.9 | 24.9 | 58.5 | 3.2 | ....do | 143 |
| 144 | Burr White Dent; rows 3 feet 8 inches apart; 1 to 3 stalks every 8 inches; leaves green. *a* | 57.89 | 4.40 | 1.93 | 12.47 | 22.24 | 1.07 | 10.5 | 4.6 | 29.6 | 52.8 | 2.5 | ....do | 144 |
| 145 | Burr White Dent; rows 3 feet 8 inches apart; 1 stalk every 6 inches; leaves green. *a* | 71.34 | 2.05 | 2.26 | 6.59 | 16.74 | 1.02 | 7.2 | 7.9 | 23.0 | 58.4 | 3.5 | ....do | 145 |
| 146 | Variety unknown, frost-bitten; gathered after becoming dry and whitened. | 12.73 | 4.89 | 11.52 | 26.95 | 41.23 | 2.68 | 5.6 | 13.2 | 30.8 | 47.4 | 3.0 | Vt. Ex. Sta. Rep., 1888, p. 74 | 146 |
| 147 | Sanford, frost-bitten 5 days before gathering | 48.90 | 3.28 | 7.41 | 13.65 | 24.72 | 2.04 | 6.4 | 14.5 | 26.7 | 48.4 | 4.0 | ....do | 147 |
| | All analyses, excluding Nos. 146 and 147. Maximum | 71.34 | 4.40 | 2.36 | 12.47 | 22.24 | 1.33 | 10.5 | 7.9 | 29.6 | 58.5 | 3.8 | | |
| | Minimum | 57.89 | 2.05 | 1.80 | 6.59 | 16.74 | 0.95 | 7.2 | 4.6 | 23.0 | 52.8 | 2.5 | | |
| | Average | **66.27** | **2.87** | **2.09** | **8.67** | **19.00** | **1.09** | **8.5** | **6.2** | **25.7** | **56.4** | **3.2** | | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Corn (maize) fodder, ears, dent varieties:** | | | | | | | | | | | | |
| 148 | Burrill & Whitman ensilage corn; rows 3 feet 8 inches apart; stalks 3 inches apart in row; kernels in milk. *a* | 66.58 | 0.60 | 3.07 | 3.94 | 24.44 | 1.37 | 1.8 | 9.2 | 11.8 | 73.1 | 4.1 | Ill. Ex. Sta. Bul. 4, 1889 ..... 148 |
| 149 | Burr White Dent; rows 3 feet 8 inches apart; 1 to 3 stalks every 9 inches in row; kernels glazed. *a* | 42.81 | 0.99 | 3.51 | 5.15 | 45.10 | 2.44 | 1.7 | 6.1 | 9.0 | 78.9 | 4.3 | .....do ..... 149 |
| 150 | Breck Boston Market fodder, cut Sept. 3 to 5. *a* | 71.78 | 0.93 | 2.40 | 6.92 | 17.46 | 0.49 | 3.3 | 8.5 | 24.6 | 61.9 | 1.7 | Mich. Ex. Sta. Bul. 49, 1889 ..... 150 |
| 151 | White dent fodder, cut Sept. 3 to 5 *a* | 65.03 | 1.54 | 2.83 | 7.58 | 22.18 | 0.84 | 4.4 | 8.1 | 21.7 | 63.4 | 2.4 | .....do ..... 151 |
| | **Corn (maize) fodder, stripped stalks, dent varieties:** | | | | | | | | | | | | |
| 152 | Burrill & Whitman Ensilage corn; planted in rows 3 feet 8 inches apart; 1 to 3 kernels every 9 inches in the row; kernels in milk, some glazed; 4 or 5 leaves at bottom dry. *a* | 77.01 | 0.70 | 0.60 | 6.92 | 14.16 | 0.60 | 3.1 | 2.6 | 30.1 | 61.6 | 2.6 | Ill. Ex. Sta. Bul. 4, 1889 ..... 152 |
| 153 | Burrill & Whitman Ensilage corn; planted in rows 3 feet 8 inches apart; 1 to 3 kernels every 9 inches in the row; kernels in milk; leaves green. *a* | 77.36 | 0.59 | 0.40 | 6.84 | 14.31 | 0.50 | 2.6 | 1.8 | 30.2 | 63.3 | 2.2 | .....do ..... 153 |
| 154 | Burr White Dent; rows 3 feet 8 inches apart; kernels 3 inches apart; kernels glazed; leaves 5 and 6 at bottom dry, others partly dry. *a* | 74.45 | 0.84 | 0.62 | 8.84 | 14.82 | 0.43 | 3.3 | 2.4 | 34.6 | 58.0 | 1.7 | .....do ..... 154 |
| 155 | Burr White Dent; rows 3 feet 8 inches apart; kernels 6 inches apart; kernels not fully in milk; leaves green. *a* | 75.52 | 0.65 | 0.64 | 6.65 | 15.97 | 0.51 | 2.7 | 2.6 | 27.2 | 65.2 | 2.3 | .....do ..... 155 |
| | Maximum | 77.36 | 0.84 | 0.64 | 8.84 | 15.97 | 0.60 | 3.3 | 2.6 | 34.6 | 65.2 | 2.6 | |
| | Minimum | 74.45 | 0.59 | 0.40 | 6.65 | 14.16 | 0.43 | 2.6 | 1.8 | 27.2 | 58.0 | 1.7 | |
| | Average | **76.08** | **0.69** | **0.56** | **7.31** | **14.85** | **0.51** | **2.9** | **2.3** | **30.7** | **62.0** | **2.1** | |
| | **Sorghum, whole plant:** | | | | | | | | | | | | |
| 156 | Sorghum, Amber | 75.04 | 0.69 | 1.03 | 5.81 | 17.03 | 0.40 | 2.8 | 4.1 | 23.3 | 68.2 | 1.6 | N. Y. State Ex. Sta. Rep., 1884, p. 330 ... 156 |
| 157 | Do | 85.92 | 0.73 | 1.06 | 6.56 | 5.34 | 0.39 | 5.2 | 7.6 | 46.6 | 37.8 | 2.8 | .....do ..... 157 |
| 158 | Do | 86.38 | 0.81 | 1.42 | 5.45 | 5.56 | 0.38 | 5.9 | 10.4 | 40.0 | 40.9 | 2.8 | .....do ..... 158 |
| 159 | Sorghum *b* | 71.50 | 1.08 | 0.95 | 6.95 | 19.34 | 0.18 | 3.8 | 3.3 | 24.3 | 68.0 | 0.6 | N. J. Ex. Sta. Rep., 1884, p. 106 ..... 159 |
| 160 | Sorghum, dried *b* | 61.59 | 1.24 | 1.33 | 8.49 | 27.04 | 0.31 | 3.2 | 3.5 | 22.1 | 70.4 | 0.8 | .....do ..... 160 |
| 161 | Sorghum | 83.43 | 0.74 | 1.04 | 5.76 | 8.56 | 0.47 | 4.5 | 6.3 | 34.7 | 51.7 | 2.8 | N. Y. State Ex. Sta. Rep., 1886, p. 365.... 161 |
| 162 | Do | 84.58 | 0.81 | 0.90 | 4.71 | 8.62 | 0.38 | 5.3 | 5.8 | 30.6 | 55.9 | 2.4 | .....do ..... 162 |
| 163 | Sorghum, Amber | 63.88 | 2.33 | 2.55 | 9.06 | 21.47 | 0.71 | 6.5 | 7.1 | 25.1 | 59.3 | 2.8 | Mo. Ex. Sta. Bul. 7, 1889 ..... 163 |
| 164 | Do | 77.31 | 1.30 | 1.94 | 5.32 | 13.71 | 0.33 | 5.7 | 8.5 | 23.5 | 60.9 | 1.4 | .....do ..... 164 |
| 165 | Sorghum *h* | 83.81 | 1.39 | 1.04 | 5.50 | 7.98 | 0.28 | 8.4 | 6.3 | 34.0 | 49.6 | 1.7 | Miss. Ex. Sta. Bul. 8, 1889 ..... 165 |
| 166 | Sorghum, Chinese *a* | 78.38 | 1.34 | 1.51 | 6.80 | 10.92 | 1.05 | 6.2 | 7.0 | 31.5 | 50.5 | 4.8 | Md. Ex. Sta. Rep. 1888..... 166 |
| 167 | Sorghum, Early Orange *a* | 83.15 | 0.72 | 1.34 | 5.48 | 8.56 | 0.75 | 4.3 | 7.9 | 32.5 | 50.8 | 4.5 | .....do ..... 167 |
| | All analyses, excluding No. 160. Maximum | 86.38 | 2.33 | 2.55 | 9.06 | 21.47 | 1.05 | 8.4 | 10.4 | 46.6 | 68.2 | 4.8 | |
| | All analyses, excluding No. 160. Minimum | 63.88 | 0.69 | 0.90 | 4.71 | 5.34 | 0.18 | 2.8 | 3.3 | 22.1 | 37.8 | 0.6 | |
| | All analyses, excluding No. 160. Average | **79.40** | **1.09** | **1.34** | **6.13** | **11.56** | **0.48** | **5.3** | **6.5** | **29.7** | **56.2** | **2.3** | |

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GREEN FODDER—Continued. | | | | | | | | | | | | | |
| | CEREAL GRASSES—continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| | Sorghum, stripped stalks: | | | | | | | | | | | | | |
| 168 | Early Amber | 75.70 | 1.59 | 1.20 | 3.89 | 17.62 | | 6.5 | 4.9 | 16.0 | 72.6 | | U. S. Dept. Agr. Rep., 1879, p. 57 | 168 |
| 169 | Honduras | 80.00 | 0.89 | 0.96 | 3.30 | 14.85 | | 4.5 | 4.8 | 16.5 | 74.2 | | ....do | 169 |
| 170 | Kaffir corn, sown in drills *h* | 76.13 | 1.75 | 3.22 | 6.16 | 11.96 | 0.78 | 7.3 | 13.5 | 25.8 | 50.1 | 3.3 | Pa. Ex. Sta. Bul. 6, 1886 | 170 |
| 171 | Chicken corn (*Sorghum vulgare*) *h** | 73.02 | 1.89 | 2.45 | 8.98 | 11.00 | 0.80 | ..... | ..... | ..... | ..... | ..... | Miss. Ex. Sta. Bul. 8, 1889 | 171 |
| 172 | Rye fodder *k* | 74.71 | 1.60 | 3.00 | 13.35 | 6.70 | 0.64 | 6.3 | 11.9 | 52.8 | 26.5 | 2.5 | N. J. Ex. Sta. Rep., 1881, p. 54 | 172 |
| 173 | Do. *k* | 74.71 | 1.70 | 2.31 | 14.17 | 6.52 | 0.59 | 6.7 | 9.1 | 56.1 | 25.8 | 2.3 | ....do | 173 |
| 174 | Do. *k* | 74.71 | 1.71 | 2.50 | 14.89 | 5.57 | 0.62 | 6.8 | 9.9 | 58.8 | 22.0 | 2.5 | ....do | 174 |
| 175 | Do. *k* | 74.71 | 2.35 | 2.44 | 14.26 | 5.52 | 0.72 | 9.3 | 9.6 | 56.5 | 21.8 | 2.8 | ....do | 175 |
| 176 | Do. *k* | 74.71 | 2.32 | 2.63 | 14.83 | 4.92 | 0.59 | 9.2 | 10.4 | 58.7 | 19.4 | 2.3 | ....do | 176 |
| 177 | Do | 78.13 | 1.61 | 2.77 | 4.92 | 12.37 | 0.20 | 7.4 | 12.6 | 22.5 | 56.6 | 0.9 | N. J. Ex. Sta. Rep., 1883, p. 75 | 177 |
| 178 | Do *a h i j* | 84.33 | 1.33 | 2.50 | 4.72 | 6.35 | 0.77 | 8.5 | 16.0 | 30.1 | 40.5 | 4.9 | Pa. Ex. Sta. Bul. 5, 1888 | 178 |
| | Maximum | 84.33 | 2.35 | 3.00 | 14.89 | 12.37 | 0.77 | 9.3 | 16.0 | 58.8 | 56.6 | 4.9 | | |
| | Minimum | 74.71 | 1.33 | 2.31 | 4.72 | 4.92 | 0.20 | 6.3 | 9.1 | 22.5 | 19.4 | 0.9 | | |
| | Average | **76.57** | **1.80** | **2.60** | **11.59** | **6.85** | **0.59** | **7.7** | **11.1** | **49.5** | **29.2** | **2.5** | | |
| | Oats fodder: | | | | | | | | | | | | | |
| 179 | Cut July 5, in bloom | 78.61 | 1.58 | 1.52 | 7.08 | 10.78 | 0.43 | 7.4 | 7.1 | 33.1 | 50.4 | 2.0 | Mass. State Ex. Sta. Rep., 1887, p. 94 | 179 |
| 180 | Cut July 13 | 71.18 | 2.01 | 2.03 | 9.46 | 14.61 | 0.71 | 7.0 | 7.1 | 32.8 | 50.7 | 2.4 | ....do | 180 |
| 181 | Cut July 5; height 3 feet 9 inches *a h i j* | 74.13 | 1.52 | 2.67 | 7.85 | 12.87 | 0.96 | 5.9 | 10.3 | 30.4 | 49.7 | 3.7 | Pa. Ex. Sta. Rep., 1887, p. 120 | 181 |
| 182 | Grain in milk *a* | 55.74 | 3.25 | 4.86 | 14.65 | 18.54 | 2.96 | 7.4 | 11.0 | 33.1 | 41.8 | 6.7 | Md. Ex. Sta. Rep., 1888, p. 68 | 182 |
| 183 | Grain in dough *a* | 31.34 | 4.18 | 6.08 | 16.78 | 39.75 | 1.87 | 6.1 | 8.9 | 24.4 | 57.9 | 2.7 | ....do | 183 |
| | Maximum | 78.61 | 4.18 | 6.08 | 16.78 | 39.75 | 2.96 | 7.4 | 11.0 | 33.1 | 57.9 | 6.7 | | |
| | Minimum | 31.34 | 1.52 | 1.52 | 7.08 | 10.78 | 0.43 | 5.9 | 7.1 | 24.4 | 41.8 | 2.0 | | |
| | Average | **62.20** | **2.51** | **3.43** | **11.16** | **19.32** | **1.38** | **6.6** | **9.1** | **29.5** | **51.1** | **3.7** | | |
| | GRASSES. | | | | | | | | | | | | | |
| | Couch, quitch, or wheat grass (*Agropyrum repens*): | | | | | | | | | | | | | |
| 184 | Cut June 23 *a* | 58.30 | 3.65 | 3.67 | 8.22 | 24.76 | 1.40 | 8.8 | 8.8 | 19.7 | 59.3 | 3.4 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 128. | 184 |
| 185 | Time of cutting unknown | 57.62 | 1.88 | 3.31 | 16.30 | 19.44 | 1.45 | 4.5 | 7.8 | 38.5 | 45.9 | 3.4 | N. Y. State Ex. Sta. Rep., 1886, p. 365 | 185 |
| | Redtop, herd's grass (of Pa.), bent grass (*Agrostis vulgaris*): | | | | | | | | | | | | | |
| 186 | Cut June 1; panicle not out; good soil *a* | 67.80 | 2.64 | 4.25 | 6.75 | 17.35 | 1.21 | 8.2 | 13.2 | 21.0 | 53.8 | 3.8 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 133. | 186 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 187 | Cut June 1; panicle out; closed; good soil *a* | 68.10 | 2.34 | 4.34 | 6.66 | 17.27 | 1.29 | 7.3 | 13.6 | 20.9 | 54.1 | 4.1 | .....do..... 187 |
| 188 | Cut June 19; in early bloom; good soil *a* | 70.10 | 2.25 | 3.81 | 6.47 | 16.29 | 1.08 | 7.6 | 12.7 | 21.6 | 54.5 | 3.6 | .....do..... 188 |
| 189 | Cut June 23; in full bloom; good soil *a* | 61.40 | 2.80 | 4.25 | 8.50 | 21.94 | 1.11 | 7.3 | 11.0 | 22.0 | 56.8 | 2.9 | .....do..... 189 |
| 190 | Cut July 1; seed in milk; good soil *a* | 53.30 | 3.08 | 4.88 | 9.07 | 28.03 | 1.64 | 6.6 | 10.4 | 19.4 | 60.1 | 3.5 | .....do..... 190 |
| 191 | Cut July 1; seed hard; good soil *a* | 51.50 | 3.27 | 4.59 | 10.02 | 28 56 | 2.06 | 6.7 | 9.5 | 20.7 | 58.8 | 4.3 | .....do..... 191 |
| 192 | Cut July 9; seed mature; good soil *a* | 57.00 | 2.28 | 3.82 | 9.35 | 26 37 | 1.18 | 5.3 | 8.9 | 21.7 | 61.4 | 2.7 | .....do..... 192 |
| 193 | Cut June 16; panicle spreading; poorer soil *a* | 68.20 | 2.67 | 3.12 | 6.52 | 18.26 | 1.23 | 8.4 | 9.8 | 20.5 | 57.4 | 3.9 | .....do..... 193 |
| 194 | Cut June 18; in early bloom; poorer soil *a* | 58.80 | 2.41 | 4.10 | 8.41 | 24.10 | 2.18 | 5.8 | 9.9 | 20.4 | 58.6 | 5.3 | .....do..... 194 |
| | Tall redtop (*Agrostis vulgaris*, var. *major*): | | | | | | | | | | | | |
| 195 | Cut June 30, 1888; in full bloom *a b* | 76.15 | 1.66 | 1.97 | 7.96 | 11.65 | 0.61 | 7.0 | 8.3 | 33.4 | 48.8 | 2.5 | Conn. State Ex. Sta. Rep., 1888, p. 101... 195 |
| 196 | Cut June, 1889; grown on same soil as 195 *a b* | 57.29 | 2.24 | 2.12 | 15.74 | 21.64 | 0.97 | 5.2 | 5.0 | 36.9 | 50.6 | 2.3 | Conn. State Ex. Sta. Rep., 1889, p. 248... 196 |
| | Fine bent (*Agrostis vulgaris*, var. *minor*): | | | | | | | | | | | | |
| 197 | Cut June 30, 1888; rather past bloom *a b* | 71.56 | 1.93 | 2.77 | 9.34 | 13.64 | 0.76 | 6.8 | 9.7 | 32.8 | 48.0 | 2.7 | Conn. State Ex. Sta. Rep., 1888, p 101... 197 |
| 198 | Cut June, 1889 *a b*; grown on same soil as 197 | 59.71 | 2.93 | 2.67 | 13.29 | 20.51 | 0.89 | 7.3 | 6.6 | 33.0 | 50.9 | 2.2 | Conn. State Ex. Sta. Rep., 1889, p. 248... 198 |
| | Five analyses in bloom. † Maximum | 76.15 | 2.80 | 4.25 | 15.74 | 24.10 | 2.18 | 7.6 | 12.7 | 36.9 | 58.6 | 5.3 | |
| | Five analyses in bloom. † Minimum | 57.29 | 1.66 | 1.97 | 6.47 | 11.65 | 0.61 | 5.2 | 5.0 | 20.4 | 48.8 | 2.3 | |
| | Five analyses in bloom. † Average | **64.75** | **2.27** | **3.25** | **19.42** | **19.13** | **1.19** | **6.6** | **9.4** | **26.8** | **53.9** | **3.3** | |
| | Meadow foxtail (*Alopecurus pratensis*): | | | | | | | | | | | | |
| 199 | Cut April 19; head just appearing *a* | 77.10 | 2.11 | 3.60 | 4.17 | 11.94 | 1.08 | 9.2 | 15.7 | 18.2 | 52.2 | 4.7 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 135. 199 |
| 200 | Cut April 19; before bloom *a* | 76.70 | 1.84 | 3.17 | 5.22 | 12.03 | 1.04 | 7.9 | 13.6 | 22.4 | 51.6 | 4.5 | .....do..... 200 |
| 201 | Cut May 1; in bloom *a* | 60.00 | 3.10 | 4.32 | 9.51 | 21.73 | 1.34 | 7.8 | 10.8 | 23.8 | 54.2 | 3.4 | .....do..... 201 |
| 202 | Cut May 12; after bloom *a* | 66.60 | 2.73 | 2.88 | 8.47 | 18.15 | 1.17 | 8.2 | 8.6 | 25.4 | 54.3 | 3.5 | .....do..... 202 |
| 203 | Time of cutting unknown | 72.63 | 1.71 | 3.12 | 8.66 | 12.72 | 1.16 | 6.2 | 11.4 | 31.7 | 46.5 | 4.2 | N. Y. State Ex. Sta. Rep., 1888, p. 237.... 203 |
| | Sweet vernal grass (*Anthoxanthum odoratum*): | | | | | | | | | | | | |
| 204 | Cut May 1; very young | 76.90 | 1.47 | 2.45 | 3.97 | 14.22 | 0.99 | 6.4 | 10.6 | 17.2 | 61.5 | 4.3 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 136. 204 |
| 205 | Cut May 1; in full bloom | 78.80 | 1.50 | 2.00 | 4.37 | 12.62 | 0.71 | 7.1 | 9.5 | 20.6 | 59.4 | 3.4 | .....do..... 205 |
| 206 | Cut June 19; after bloom | 69.90 | 2.20 | 4.00 | 6.37 | 16.07 | 1.46 | 7.3 | 13.3 | 21.2 | 53.3 | 4.9 | .....do..... 206 |
| 207 | Cut July 19; after bloom | 53.40 | 2.70 | 3.31 | 11.65 | 27.04 | 1.90 | 5.8 | 7.1 | 25.0 | 58.0 | 4.1 | .....do..... 207 |
| 208 | Time of cutting unknown | 67.41 | 1.57 | 2.10 | 10.74 | 17.02 | 1.16 | 4.8 | 6.4 | 33.0 | 52.2 | 3.6 | N. Y. State Ex. Sta. Rep., 1886, p. 365 .. 208 |
| 209 | Cut June 11, 1888; past bloom *a b* | 75.13 | 1.46 | 2.89 | 7.73 | 11.95 | 0.84 | 5.9 | 11.6 | 31.1 | 48.1 | 3.3 | Conn. State Ex. Sta. Rep., 1888, p. 101 .. 209 |
| 210 | Cut June 10, 1889 *a b* | 74.41 | 1.55 | 2.29 | 7.68 | 13.10 | 0.97 | 6.1 | 8.9 | 30.0 | 51.2 | 3.8 | Conn. State Ex. Sta. Rep., 1889, p. 248... 210 |
| | Tall oat grass, evergreen grass (*Arrhenatherum avenaceum*): | | | | | | | | | | | | |
| 211 | Cut May 25; in full bloom *a* | 62.30 | 2.99 | 3.31 | 9.17 | 20.71 | 1.52 | 7.9 | 8.8 | 24.3 | 60.0 | 4.0 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 136. 211 |
| 212 | Cut June 4, after bloom *a* | 74.40 | 2.02 | 3.75 | 5.51 | 13.25 | 1.07 | 7.9 | 14.6 | 21.5 | 51.8 | 4.2 | .....do..... 212 |
| 213 | Time of cutting unknown | 69.07 | 1.63 | 2.09 | 10.76 | 15.46 | 1.01 | 5.3 | 6.8 | 34.8 | 49.8 | 3.3 | N. Y. State Ex. Sta. Rep., 1886, p. 365 ... 213 |
| 214 | Do | 68.95 | 1.90 | 2.35 | 10.78 | 15.01 | 1.01 | 6.1 | 7.6 | 34.7 | 48.4 | 3.2 | N. Y. State Ex. Sta. Rep., 1888, p. 237 ... 214 |
| 215 | Cut June 16, 1888; in full bloom *a b* grown on | 73.46 | 1.56 | 2.11 | 9.24 | 12.97 | 0.65 | 5.9 | 8.0 | 34.8 | 48.9 | 2.4 | Conn. State Ex. Sta. Rep., 1888, p. 101 ... 215 |
| 216 | Cut June 10, 1889; in full bloom *a b* same soil | 72.62 | 1.60 | 1.74 | 9.70 | 13.73 | 0.61 | 5.8 | 6.4 | 35.5 | 50.1 | 2.2 | Conn. State Ex. Sta. Rep., 1889, p. 248... 216 |
| | Three analyses in full bloom. ‡ Maximum | 73.46 | 2.99 | 3.31 | 9.70 | 20.71 | 1.52 | 7.9 | 14.6 | 34.7 | 60.0 | 4.2 | |
| | Three analyses in full bloom. ‡ Minimum | 62.30 | 1.56 | 1.74 | 9.17 | 12.97 | 0.61 | 5.8 | 6.4 | 21.5 | 48.4 | 2.2 | |
| | Three analyses in full bloom. ‡ Average | **69.46** | **2.05** | **2.38** | **9.37** | **15.82** | **0.92** | **6.7** | **7.8** | **30.7** | **51.8** | **3.0** | |

* Adds 98.14.

† Nos. 188, 189, 194–196.

‡ Nos. 211, 215, 216.

| | | In fresh or air-dry material. | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | |
| | GREEN FODDER—Continued. | | | | | | | | | | | | |
| | GRASSES—continued. | | | | | | | | | | | | |
| | Yellow oat grass (*Avena flavescens*), grown on same soil: | % | % | % | % | % | % | % | % | % | % | % | |
| 217 | Cut June 16, 1888; in full bloom *a b* | 66.70 | 1.38 | 2.55 | 11.39 | 17.20 | 0.78 | 4.1 | 7.7 | 34.2 | 51.7 | 2.3 | Conn. State Ex. Sta. Rep., 1888, p. 101 | 217 |
| 218 | Cut June 16, 1889; in full bloom *a b* | 70.11 | 1.71 | 1.91 | 10.06 | 15.46 | 0.74 | 5.7 | 6.4 | 33.7 | 51.7 | 2.5 | Conn. State Ex. Sta. Rep., 1889, p. 248 | 218 |
| | Average | 68.40 | 1.54 | 2.23 | 10.73 | 16.34 | 0.76 | 4.9 | 7.1 | 33.9 | 51.7 | 3.4 | | |
| | Erect brome grass (*Bromus erectus*): | | | | | | | | | | | | | |
| 219 | Cut Apr. 27; very young *a* | 85.50 | 1.25 | 2.28 | 3.87 | 6.57 | 0.53 | 8.6 | 15.7 | 26.7 | 45.3 | 3.7 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 135. | 219 |
| 220 | Cut May 8, before bloom *a* | 74.30 | 1.86 | 3.14 | 6.49 | 13.37 | 0.84 | 7.2 | 12.2 | 25.3 | 52.0 | 3.3 | do | 220 |
| 221 | Cut May 12, before bloom *a* | 72.20 | 2.06 | 3.06 | 6.81 | 14.84 | 1.03 | 7.4 | 11.0 | 24.5 | 53.4 | 3.7 | do | 221 |
| 222 | Cut May 19, early bloom *a* | 63.70 | 2.79 | 3.19 | 8.90 | 20.40 | 1.02 | 7.7 | 8.8 | 24.5 | 56.2 | 2.8 | do | 222 |
| | Schrader's grass, rescue grass (*Bromus unioloides*): | | | | | | | | | | | | | |
| 223 | Cut April 23; panicle not out *a* | 80.60 | 2.07 | 3.31 | 3.60 | 9.45 | 0.97 | 10.7 | 17.1 | 18.6 | 48.6 | 5.0 | do | 223 |
| 224 | Cut May 4; panicle closed *a* | 75.40 | 2.20 | 3.53 | 5.47 | 12.55 | 0.85 | 8.9 | 14.3 | 22.2 | 51.1 | 3.5 | do | 224 |
| 225 | Cut May 13, in full bloom *a* | 79.40 | 1.91 | 2.60 | 4.67 | 10.60 | 0.82 | 9.3 | 12.6 | 22.7 | 51.4 | 4.0 | do | 225 |
| 226 | Cut June 1, after bloom *a* | 67.50 | 2.17 | 3.52 | 8.23 | 17.81 | 0.77 | 6.7 | 10.8 | 25.3 | 54.8 | 2.4 | do | 226 |
| 227 | Cut June 1, in seed; brown *a* | 64.70 | 3.02 | 3.45 | 7.01 | 21.08 | 0.74 | 8.6 | 9.8 | 19.9 | 59.6 | 2.1 | do | 227 |
| | Orchard grass (*Dactylis glomerata*): | | | | | | | | | | | | | |
| 228 | Cut Apr. 23; panicle not out; earlier growth *a* | 78.80 | 2.18 | 3.39 | 3.98 | 10.78 | 0.87 | 10.3 | 16.0 | 18.8 | 50.8 | 4.1 | U. S. Dept Agr., Chem. Comp. Am. Grasses, 1884, p. 134. | 228 |
| 229 | Cut May 4; panicle closed; earlier growth *a* | 79.30 | 1.71 | 2.15 | 4.80 | 11.40 | 0.64 | 8.3 | 10.4 | 23.2 | 55.0 | 3.1 | do | 229 |
| 230 | Cut May 13; in full bloom; earlier growth *a* | 77.30 | 1.83 | 2.16 | 5.77 | 12.20 | 0.74 | 8.1 | 9.5 | 25.4 | 53.8 | 3.2 | do | 230 |
| 231 | Cut June 1; after bloom; earlier growth *a* | 73.50 | 2.39 | 2.19 | 7.22 | 13.95 | 0.75 | 9.0 | 8.3 | 27.3 | 52.6 | 2.8 | do | 231 |
| 232 | Cut June 18; in bloom; later growth *a* | 66.90 | 2.86 | 4.14 | 8.16 | 16.62 | 1.32 | 8.6 | 12.5 | 24.7 | 52 2 | 4.0 | do | 232 |
| 233 | Cut June 23; late bloom; later growth *a* | 60.20 | 2.39 | 3.43 | 9.72 | 22.82 | 1.44 | 6.0 | 8.6 | 24.4 | 57.4 | 3.6 | do | 233 |
| 234 | Cut July 1; seed nearly ripe; later growth *a* | 62.30 | 2.54 | 2.75 | 9.46 | 21.69 | 1.26 | 6.7 | 7.3 | 25.1 | 57.6 | 3.3 | do | 234 |
| 235 | Cut June 12; head not out; first year's growth. *a* | 79.50 | 2.36 | 2.65 | 4.23 | 9.85 | 1.41 | 11.5 | 12.9 | 20.6 | 48.1 | 6.9 | do | 235 |
| 236 | Cut July 15; green; first year's growth *a* | 72.30 | 2.91 | 3.89 | 6.00 | 13.00 | 1.90 | 10.5 | 14.0 | 21.6 | 47.0 | 6.9 | do | 236 |
| 237 | Cut July 15; yellow; first year's growth *a* | 74.60 | 2.58 | 2.31 | 5.70 | 13.30 | 1.51 | 10.1 | 9.1 | 22.4 | 52.4 | 6.0 | do | 237 |
| 238 | Cut Oct. 25; first year's growth *a* | 68.70 | 3.43 | 4.17 | 6.65 | 15.02 | 2.03 | 11.0 | 13.3 | 21.2 | 48.0 | 6.5 | do | 238 |
| 239 | Aftermath | 76.25 | 2.60 | 2.97 | 7.60 | 9.23 | 1.35 | 10.9 | 12.2 | 32.0 | 39.2 | 5.7 | N. Y. State Ex. Sta. Rep., 1885, p. 302 | 239 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 240 | Cut 1886 | 65.00 | 1.99 | 2.58 | 12.54 | 16.73 | 1.16 | 5.7 | 7.4 | 35.8 | 47.8 | 3.3 | N. Y. State Ex. Sta. Rep., 1886, p. 365 | 240 |
| 241 | Cut 1887, grown en same soil as 240 | 73.19 | 1.84 | 2.40 | 10.54 | 10.87 | 1.14 | 6.9 | 8.9 | 39.4 | 40.5 | 4.3 | N. Y. State Ex. Sta. Rep., 1887, p. 407 | 241 |
| 242 | Aftermath | 70.90 | 2.11 | 2.76 | 10.14 | 12.87 | 1.22 | 7.3 | 9.5 | 34.9 | 44.1 | 4.2 | N. Y. State Ex. Sta. Rep., 1888, p. 237 | 242 |
| 243 | Cut June 11, 1888; in full bloom *a b* | 77.74 | 1.56 | 2.24 | 7.81 | 9.92 | 0.73 | 7.0 | 10.1 | 35.1 | 44.6 | 3.2 | Conn. State Ex. Sta. Rep., 1888, p. 101 | 243 |
| 244 | Cut June 10, 1889; in full bloom *a b* | 69.86 | 1.75 | 1.92 | 11.11 | 14.55 | 0.81 | 5.8 | 6.4 | 36.9 | 48.2 | 2.7 | Conn. State Ex. Sta. Rep., 1889, p. 248 | 244 |
| | Four analyses in full bloom.* Maximum | 77.30 | 2.86 | 4.14 | 11.11 | 16.62 | 1.32 | 8.1 | 10.1 | 36.9 | 57.3 | 3.6 | | |
| | Four analyses in full bloom.* Minimum | 66.90 | 1.56 | 1.92 | 5.77 | 9.92 | 0.73 | 5.8 | 6.4 | 24.4 | 44.6 | 2.7 | | |
| | Four analyses in full bloom.* Average | **72.95** | **2.00** | **2.61** | **8.21** | **13.33** | **0.90** | **7.4** | **9.6** | **30.4** | **49.3** | **3.3** | | |
| | Sheep's fescue (*Festuca ovina*): | | | | | | | | | | | | | |
| 245 | Cut April 27, very young *a* | 70.00 | 1.94 | 4.47 | 6.09 | 16.21 | 1.29 | 6.5 | 14.9 | 20.3 | 54.0 | 4.3 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 136. | 245 |
| 246 | Cut May 8, before bloom *a* | 65.40 | 1.87 | 3.03 | 8.69 | 19.76 | 1.25 | 5.4 | 8.8 | 25.1 | 57.1 | 3.6 | ....do | 246 |
| 247 | Cut May 12, before bloom *a* | 67.00 | 1.98 | 3.13 | 8.47 | 18.29 | 1.13 | 6.0 | 9.5 | 25.7 | 55.4 | 3.4 | ....do | 247 |
| 248 | Cut May 21, in bloom *a* | 53.70 | 2.59 | 4.58 | 11.02 | 26.95 | 1.16 | 5.6 | 9.9 | 23.8 | 58.2 | 2.5 | ....do | 248 |
| 249 | Cut June 1, after bloom *a* | 53.90 | 3.03 | 4.29 | 11.05 | 26.32 | 1.41 | 6.6 | 9.3 | 24.0 | 57.0 | 3.1 | ....do | 249 |
| 250 | Cut May 21 *a* | 67.00 | 1.85 | 3.26 | 7.85 | 19.21 | 0.83 | 5.6 | 9.9 | 23.8 | 58.2 | 2.5 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127. | 250 |
| 251 | Cut in bloom; grown under evergreens | 71.85 | 1.85 | 2.91 | 9.98 | 12.68 | 0.73 | 6.6 | 10.3 | 35.5 | 45.0 | 2.6 | Conn. State Ex. Sta. Rep., 1887, p. 103 | 251 |
| 252 | Meadow fescue (*Festuca pratensis*) | 68.70 | 1.97 | 2.44 | 10.93 | 14.82 | 1.14 | 6.3 | 7.8 | 34.9 | 47.4 | 3.6 | N. Y. State Ex. Sta. Rep., 1886, p. 365 | 252 |
| 253 | Cut June 20, in full bloom *a b* | 69.89 | 1.81 | 2.73 | 10.53 | 14.24 | 0.80 | 6.0 | 9.1 | 35.0 | 47.3 | 2.6 | Conn. State Ex. Sta. Rep., 1888, p. 101 | 253 |
| 254 | Cut June 20, 1888, in full bloom | 67.62 | 1.86 | 2.69 | 11.34 | 15.72 | 0.77 | 5.7 | 8.3 | 35.0 | 48.6 | 2.4 | ....do | 254 |
| 255 | Cut June, 1889, in full bloom; grown on same soil as 254 *a b*. | 73.18 | 1.58 | 1.84 | 10.19 | 12.55 | 0.66 | 5.9 | 6.9 | 38.0 | 46.7 | 2.5 | Conn. State Ex. Sta. Rep., 1889, p. 248 | 255 |
| | Maximum | 73.18 | 1.97 | 2.86 | 11.34 | 15.72 | 1.14 | 6.3 | 9.1 | 38.0 | 48.6 | 3.6 | | |
| | Minimum | 67.62 | 1.58 | 1.84 | 10.19 | 12.55 | 0.66 | 5.7 | 6.9 | 34.9 | 46.7 | 2.4 | | |
| | Average | **69.85** | **1.81** | **2.42** | **10.75** | **14.33** | **0.84** | **6.0** | **8.0** | **35.7** | **47.5** | **2.8** | | |
| | Velvet grass, mesquite, soft grass (*Holcus lanatus*): | | | | | | | | | | | | | |
| 256 | Cut Apr. 2, very young *a* | 82.30 | 1.77 | 2.19 | 3.30 | 9.64 | 0.81 | 10.0 | 12.4 | 18.6 | 54.5 | 4.5 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 136. | 256 |
| 257 | Cut May 25, late bloom *a* | 50.60 | 4.07 | 3.63 | 12.35 | 27.43 | 1.92 | 8.2 | 7.4 | 25.0 | 55.5 | 3.9 | ....do | 257 |
| | English rye grass (*Lolium perenne*): | | | | | | | | | | | | | |
| 258 | Cut May 1, head invisible *a* | 78.60 | 1.85 | 2.50 | 3.94 | 12.35 | 0.76 | 8.7 | 11.7 | 18.4 | 57.6 | 3.6 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 137. | 258 |
| 259 | Cut May 4, head invisible *a* | 82.40 | 1.67 | 2.31 | 3.27 | 9.69 | 0.76 | 9.5 | 13.1 | 18.0 | 55.1 | 4.3 | ....do | 259 |
| 260 | Cut May 4, head well out *a* | 74.00 | 2.07 | 2.89 | 5.34 | 14.71 | 0.94 | 8.0 | 11.1 | 20.6 | 56.7 | 3.6 | ....do | 260 |
| 261 | Cut May 12, before bloom *a* | 76.40 | 1.98 | 2.12 | 5.65 | 12.96 | 0.89 | 8.4 | 9.0 | 23.9 | 55.0 | 3.7 | ....do | 261 |
| 262 | Cut June 1, after bloom | 63.10 | 2.77 | 2.81 | 9.38 | 20.97 | 0.97 | 7.5 | 7.6 | 25.4 | 56.9 | 2.6 | ....do | 262 |
| | Italian rye grass (*Lolium perenne*, var. *italicum*): | | | | | | | | | | | | | |
| 263 | Cut Apr. 27, head invisible *a* | 82.30 | 2.35 | 3.83 | 3.22 | 7.45 | 0.85 | 13.3 | 21.6 | 18.2 | 42.0 | 4.9 | ....do | 263 |
| 264 | Cut May 21, head just out *a* | 82.70 | 1.97 | 2.48 | 3.76 | 8.43 | 0.66 | 12.7 | 14.3 | 17.0 | 49.6 | 6.4 | ....de | 264 |
| 265 | Cut May 26, in full bloom *a* | 78.00 | 2.42 | 3.19 | 4.49 | 11.39 | 0.51 | 11.0 | 14.5 | 20.4 | 51.8 | 2.3 | ....do | 265 |

*Nos. 230, 232, 243, 244.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GREEN FODDER—Continued. | | | | | | | | | | | | | |
| | GRASSES—continued. | | | | | | | | | | | | | |
| | Italian rye grass (*Lolium perenne*, var. *italicum*)—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 266 | Cut June 4, after bloom *a* | 71.50 | 2.50 | 3.30 | 6.23 | 15.34 | 1.13 | 8.8 | 11.6 | 21.9 | 53.7 | 4.0 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 137. | 266 |
| 267 | Cut June 2, head not out *a* * | 84.00 | 2.12 | 3.01 | 2.48 | 7.29 | 1.10 | 13.2 | 18.8 | 15.5 | 45.6 | 6.9 | ....do | 267 |
| 268 | Cut June 12, head not out *a* * | 82.70 | 2.20 | 2.47 | 2.94 | 8.59 | 1.10 | 12.7 | 14.3 | 17.0 | 49.6 | 6.4 | ....do | 268 |
| 269 | Cut June 19, head not out *a* * | 82.30 | 2.49 | 2.98 | 3.16 | 7.98 | 1.09 | 14.1 | 16.9 | 17.8 | 45.0 | 6.2 | ....do | 269 |
| 270 | Cut July 10, head not out *a* * | 78.90 | 2.82 | 3.05 | 4.36 | 9.49 | 1.38 | 13.9 | 14.4 | 20.7 | 44.5 | 6.5 | ....do | 270 |
| 271 | Cut October 25, head not out *a* * | 71.60 | 3.09 | 3.86 | 6.36 | 15.38 | 1.51 | 10.9 | 13.6 | 22.4 | 47.8 | 5.3 | ....do | 271 |
| | Coming into bloom (fertilizers, pounds per acre)— | | | | | | | | | | | | | |
| 272 | 300 sulphate of potash *a d e* | 74.00 | 2.69 | 3.36 | 6.57 | 11.88 | 1.55 | 10.4 | 12.9 | 25.3 | 45.4 | 6.0 | N. Y. State Ex. Sta. Rep., 1888, p. 252 | 272 |
| 273 | 150 sulphate of ammonia *a d e* | 74.03 | 2.65 | 3.36 | 6.16 | 12.53 | 1.27 | 10.2 | 13.3 | 23.7 | 47.9 | 4.9 | ....do | 273 |
| 274 | 350 acid phosphate *a d e* | 73.14 | 2.50 | 3.00 | 6.78 | 13.24 | 1.34 | 9.3 | 11.2 | 25.2 | 49.3 | 5.0 | ....do | 274 |
| 275 | 300 sulphate of potash, 150 sulphate of ammonia, 350 acid phosphate. *a d e* | 73.83 | 2.51 | 3.16 | 6.60 | 12.39 | 1.51 | 9.6 | 12.1 | 25.3 | 47.2 | 5.8 | ....do | 275 |
| 276 | 100 sulphate of potash, 350 acid phosphate *a* | 72.51 | 2.53 | 2.94 | 6.94 | 13.73 | 1.35 | 9.2 | 10.7 | 26.5 | 49.7 | 4.9 | ....do | 276 |
| 277 | 100 sulphate of potash, 150 sulphate of ammonia. *a* | 74.53 | 2.49 | 3.12 | 6.75 | 11.95 | 1.16 | 9.8 | 12.2 | 24.7 | 48.7 | 4.6 | ....do | 277 |
| 278 | 150 sulphate of ammonia, 350 acid phosphate *a* | 73.15 | 2.48 | 3.00 | 6.62 | 13.37 | 1.38 | 9.2 | 11.2 | 24.7 | 49.8 | 5.1 | ....do | 278 |
| 279 | 350 lime, 150 sulphate of ammonia, 350 acid phosphate. *a* | 74.26 | 2.44 | 3.14 | 6.72 | 12.00 | 1.44 | 9.5 | 12.2 | 24.0 | 48.7 | 5.6 | ....do | 279 |
| 280 | 350 lime, 150 sulphate of ammonia, 300 sulphate of potash. *a* | 76.10 | 2.14 | 3.25 | 5.74 | 11.53 | 1.24 | 9.0 | 13.6 | 24.0 | 48.2 | 5.2 | ....do | 280 |
| 281 | 350 lime, 350 acid phosphate, 150 sulphate of ammonia, 300 sulphate of potash. *a* | 75.92 | 2.22 | 3.14 | 5.53 | 11.93 | 1.26 | 9.2 | 13.1 | 22.9 | 49.6 | 5.2 | ....do | 231 |
| 282 | 350 lime, 150 sulphate of ammonia, 550 gypsum *a* | 74.13 | 2.33 | 3.30 | 6.88 | 11.94 | 1.42 | 9.0 | 12.7 | 26.6 | 46.2 | 5.5 | ....do | 282 |
| 283 | 350 acid phosphate, 150 sulphate of ammonia, 550 gypsum, 300 sulphate of potash. *a* | 75.03 | 2.40 | 2.84 | 6.43 | 12.18 | 1.12 | 9.6 | 11.4 | 25.7 | 48.8 | 4.5 | ....do | 283 |
| 284 | 350 lime *a* | 74.39 | 2.13 | 3.22 | 6.15 | 12.84 | 1.27 | 8.3 | 12.6 | 23.9 | 50.2 | 5.0 | ....do | 284 |
| 285 | 550 gypsum *a* | 69.55 | 2.48 | 3.77 | 7.28 | 15.42 | 1.50 | 8.2 | 12.4 | 23.8 | 50.7 | 4.9 | ....do | 285 |
| 286 | Nothing *a* | 71.53 | 2.44 | 2.90 | 7.00 | 14.82 | 1.31 | 8.5 | 10.2 | 24.6 | 52.1 | 4.6 | ....do | 286 |
| 287 | 100 sodium chloride *a* | 73.41 | 2.58 | 2.84 | 6.79 | 13.24 | 1.14 | 9.7 | 10.7 | 25.6 | 49.7 | 4.3 | ....do | 287 |
| 288 | 180 nitrate of soda *a* | 74.84 | 2.32 | 2.66 | 6.56 | 12.54 | 1.08 | 9.2 | 10.6 | 26.0 | 49.9 | 4.3 | ....do | 288 |
| 289 | 150 sulphate of ammonia *a* | 76.61 | 2.11 | 2.57 | 5.87 | 11.72 | 1.12 | 9.0 | 11.0 | 25.1 | 50.1 | 4.8 | ....do | 289 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 290 | 150 muriate of potash *a* | 71.51 | 2.35 | 3.05 | 7.02 | 14.61 | 1.46 | 8.3 | 10.7 | 24.6 | 51.3 | 5.1 | do | 290 |
| 291 | 300 sulphate of potash *a* | 71.42 | 2.46 | 3.29 | 6.75 | 13.63 | 1.45 | 8.9 | 11.9 | 24.5 | 49.4 | 5.3 | do | 291 |
| 292 | 50 ferrous sulphate *a* | 72.33 | 2.54 | 2.59 | 6.94 | 14.33 | 1.27 | 9.2 | 9.4 | 25.1 | 51.7 | 4.6 | do | 292 |
| 293 | Barnyard manure *a* | 70.65 | 2.75 | 2.66 | 7.53 | 15.10 | 1.38 | 9.4 | 9.1 | 25.7 | 51.1 | 4.7 | do | 293 |
| 294 | Nothing *a* | 70.02 | 2.70 | 2.62 | 8.34 | 14.82 | 1.50 | 8.7 | 8.7 | 25.1 | 52.5 | 5.0 | do | 294 |
| 295 | Do. *a* | 71.96 | 2.53 | 2.70 | 7.30 | 14.26 | 1.25 | 9.0 | 9.6 | 26.0 | 50.9 | 4.5 | do | 295 |
| | Maximum | 76.61 | 2.75 | 3.77 | 7.53 | 15.42 | 1.55 | 10.4 | 13.6 | 26.6 | 52.5 | 6.0 | | |
| | Minimum | 69.55 | 2.11 | 2.57 | 5.53 | 11.53 | 1.08 | 8.2 | 8.7 | 22.9 | 45.4 | 4.3 | | |
| | Average | **73.16** | **2.46** | **3.06** | **6.72** | **13.27** | **1.33** | **9.2** | **11.4** | **25.1** | **49.3** | **5.0** | | |
| | Crab grass, finger grass (*Panicum sanguinale*): | | | | | | | | | | | | | |
| 296 | Cut June 23 | 76.50 | 3.53 | 5.44 | 4.47 | 8.93 | 1.13 | 15.0 | 23.1 | 19.0 | 38.1 | 4.8 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 125. | 296 |
| 297 | Time of cutting unknown | 75.99 | 2.26 | 2.91 | 7.49 | 10.66 | 0.69 | 9.4 | 12.1 | 31.2 | 44.4 | 2.9 | N. C. Ex. Sta. Rep., 1888, p. 131 | 297 |
| | Texas millet (*Panicum texanum*): | | | | | | | | | | | | | |
| 298 | First cut, June 19, before bloom *a h i j* | 83.82 | 2.40 | 2.48 | 3.10 | 7.60 | 0.60 | 14.8 | 15.3 | 19.2 | 47.0 | 3.7 | S. C. Ex. Sta. Rep., 1882, p. 131 | 298 |
| 299 | Second cut, July 2, in full bloom *a h i j* | 81.61 | 1.74 | 1.35 | 3.89 | 10.94 | 0.47 | 9.5 | 7.4 | 21.1 | 59.4 | 2.6 | do | 299 |
| | Timothy, herd's grass (of New England and New York) (*Phleum pratense*): | | | | | | | | | | | | | |
| 300 | Cut when well headed out *h* † | 61.72 | 1.80 | 3.66 | 12.65 | 19.42 | 0.75 | 4.7 | 9.6 | 33.0 | 50.8 | 1.9 | Conn. State (Middletown) Ex. Sta. Rep., 1877–'78, p. 31. | 300 |
| 301 | Cut when in full bloom *h* † | 66.83 | 1.44 | 2.36 | 11.04 | 17.68 | 0.65 | 4.4 | 7.1 | 32.3 | 53.2 | 2.0 | do | 301 |
| 302 | Cut when out of bloom *h* † | 59.89 | 1.67 | 2.83 | 13.55 | 21.36 | 0.70 | 4.2 | 7.1 | 33.8 | 53.1 | 1.8 | do | 302 |
| 303 | Cut when nearly ripe *h* † | 55.29 | 1.63 | 3.04 | 15.84 | 23.32 | 0.88 | 3.7 | 6.8 | 35.4 | 52.1 | 2.0 | do | 303 |
| 304 | Cut June 23, nearly headed out *h* ‡ | 78.70 | 1.60 | 2.34 | 6.11 | 10.45 | 0.80 | 7.5 | 11.0 | 28.7 | 49.0 | 3.8 | Me. State Col. Rep., 1879, p. 42 | 304 |
| 305 | Cut July 3, in full bloom *h* ‡ | 71.92 | 1.70 | 2.32 | 9.35 | 13.87 | 0.84 | 6.1 | 8.3 | 33.3 | 49.3 | 3.0 | do | 305 |
| 306 | Cut July 14, out of bloom *h* ‡ | 65.20 | 1.80 | 2.00 | 12.09 | 17.97 | 0.94 | 5.2 | 5.7 | 34.7 | 51.7 | 2.7 | do | 306 |
| 307 | Cut July 30, nearly ripe *h* ‡ | 63.27 | 1.83 | 2.02 | 13.62 | 18.45 | 0.81 | 5.0 | 5.5 | 37.1 | 50.2 | 2.2 | do | 307 |
| 308 | Cut June 1, spike invisible *a* § | 70.70 | 2.54 | 3.67 | 5.83 | 15.92 | 1.34 | 8.7 | 12.5 | 19.9 | 54.3 | 4.6 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 133. | 308 |
| 309 | Cut June 1, spike visible *a* § | 71.90 | 1.80 | 3.34 | 5.91 | 16.09 | 0.96 | 6.4 | 11.9 | 21.0 | 57.3 | 3.4 | do | 309 |
| 310 | Cut June 23, before bloom *a* § | 67.50 | 3.19 | 3.36 | 7.16 | 17.61 | 1.18 | 9.8 | 10.3 | 22.0 | 54.3 | 3.6 | do | 310 |
| 311 | Cut June 23, in early bloom *a* § | 64.90 | 2.12 | 3.58 | 7.97 | 20.08 | 1.35 | 6.0 | 10.2 | 22.7 | 57.3 | 3.8 | do | 311 |
| 312 | Cut June 18, in full bloom *a* § | 67.20 | 1.86 | 3.25 | 7.19 | 19.33 | 1.17 | 5.6 | 9.9 | 21.9 | 59.0 | 3.6 | do | 312 |
| 313 | Cut June 18, in early seed *a* § | 77.80 | 2.34 | 2.68 | 5.08 | 11.34 | 0.76 | 10.5 | 12.1 | 22.9 | 51.1 | 3.4 | do | 313 |
| 314 | Cut June 4, in bloom *a* ‖ | 63.40 | 2.40 | 3.10 | 8.61 | 21.04 | 1.45 | 6.6 | 8.5 | 23.5 | 57.4 | 4.0 | do | 314 |
| 315 | Cut July 1, in full bloom *a* ‖ | 71.90 | 1.58 | 2.10 | 6.42 | 17.16 | 0.84 | 5.6 | 7.5 | 22.8 | 61.1 | 3.0 | do | 315 |
| 316 | Cut July 19, head out *a* * | 78.56 | 1.84 | 3.03 | 5.14 | 10.12 | 1.31 | 8.6 | 14.1 | 24.0 | 47.2 | 6.1 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 133. | 316 |
| 317 | Cut July 26, in bloom *a* * | 66.75 | 2.38 | 3.65 | 9.09 | 16.64 | 1.49 | 7.2 | 11.0 | 27.4 | 49.9 | 4.5 | do | 317 |
| 318 | Cut July 3, after bloom *a* * | 56.63 | 2.83 | 3.79 | 12.26 | 22.46 | 2.03 | 6.5 | 8.7 | 28.3 | 51.8 | 4.7 | do | 318 |
| 319 | Cut July 10, after bloom *a* * | 58.86 | 2.31 | 3.37 | 11.14 | 22.79 | 1.53 | 5.6 | 8.2 | 27.1 | 55.4 | 3.7 | do | 319 |
| 320 | Cut June 8, head not out *a* | 70.00 | 2.38 | 3.29 | 8.76 | 14.98 | 0.59 | 7.9 | 11.0 | 29.2 | 49.9 | 2.0 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 134. | 320 |
| 321 | Cut June 15, before bloom *a* | 67.50 | 2.48 | 2.53 | 9.64 | 17.11 | 0.74 | 7.6 | 7.8 | 29.6 | 52.7 | 2.3 | do | 321 |
| 322 | Cut June 26, in bloom *a* | 64.50 | 2.50 | 1.96 | 11.45 | 18.81 | 0.78 | 7.0 | 5.5 | 32.3 | 53.0 | 2.2 | do | 322 |
| 323 | Cut July 6, after bloom *a* | 56.30 | 2.90 | 2.43 | 13.69 | 23.57 | 1.11 | 6.6 | 5.6 | 31.3 | 54.0 | 2.5 | do | 323 |
| 324 | Cut July 16, in early seed *a* | 53.00 | 2.80 | 2.27 | 11.61 | 28.56 | 1.76 | 5.9 | 4.8 | 24.7 | 60.9 | 3.7 | do | 324 |

* First year's growth. † Heavy, wet (underdrained) clayey loam; in grass since 1872. ‡ Land in grass since 1885. § Good soil. ‖ Poor soil.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GREEN FODDER—Continued. | | | | | | | | | | | | | |
| | GRASSES—continued. | | | | | | | | | | | | | |
| | Timothy, herd's grass (of New England and New York) (*Phleum pratense*)—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 325 | Full bloom | 57.32 | 1.85 | 3.41 | 13.92 | 22.39 | 1.11 | 4.3 | 8.0 | 32.6 | 52.5 | 2.6 | N. Y. State Ex. Sta. Rep., 1887, p. 413 | 325 |
| 326 | Late cut | 46.98 | 1.91 | 3.38 | 18.56 | 27.74 | 1.43 | 3.6 | 6.4 | 35.0 | 52.3 | 2.7 | do | 326 |
| 327 | Full bloom | 59.85 | 2.22 | 3.26 | 12.30 | 21.14 | 1.23 | 5.5 | 8.1 | 30.6 | 52.7 | 3.1 | do | 327 |
| 328 | Late cut | 48.68 | 2.31 | 3.31 | 19.35 | 25.03 | 1.32 | 4.5 | 6.4 | 37.7 | 48.8 | 2.6 | do | 328 |
| 329 | Full bloom | 59.77 | 2.23 | 3.14 | 12.94 | 20.84 | 1.28 | 5.5 | 7.8 | 31.7 | 51.8 | 3.2 | do | 329 |
| 330 | Late cut | 48.78 | 2.48 | 3.14 | 16.57 | 27.43 | 1.60 | 4.8 | 6.1 | 32.4 | 53.6 | 3.1 | do | 330 |
| 331 | Full bloom, 1886* | 71.36 | 1.36 | 1.34 | 8.56 | 16.54 | 0.84 | 4.8 | 4.7 | 29.9 | 57.7 | 2.9 | N. Y. State Ex. Sta. Rep., 1887, p. 407 | 331 |
| 332 | Full bloom 1887* | 59.85 | 2.22 | 3.26 | 12.30 | 21.14 | 1.23 | 5.5 | 8.1 | 30.7 | 52.6 | 3.1 | do | 332 |
| 333 | Fertilized, cut in bloom *c* | 65.74 | 1.81 | 2.81 | 11.38 | 17.59 | 0.67 | 5.3 | 8.2 | 33.2 | 51.4 | 1.9 | Mass. State Ex. Sta. Bul. 24, 1887, p. 10 | 333 |
| 334 | Unfertilized, cut in bloom | 65.00 | 1.88 | 3.09 | 11.38 | 17.93 | 0.72 | 5.3 | 8.8 | 32.5 | 51.3 | 2.1 | Mass. State Ex. Sta. Bul. 26, 1887, p. 8 | 334 |
| | In full bloom (fertilizer, pounds per acre)— | | | | | | | | | | | | | |
| 335 | 300 sulphate of potash *a c d e* | 60.86 | 1.69 | 2.72 | 12.18 | 21.37 | 1.18 | 4.3 | 6.9 | 31.1 | 54.6 | 3.0 | N. Y. State Ex. Sta. Rep., 1887, p. 449 | 335 |
| 336 | 150 sulphate of ammonia *a c d e* | 55.32 | 1.83 | 3.35 | 14.49 | 23.79 | 1.22 | 4.1 | 7.5 | 32.4 | 53.3 | 2.7 | do | 336 |
| 337 | 350 acid phosphate *a c d e* | 58.12 | 2.14 | 3.14 | 13.69 | 21.38 | 1.53 | 5.1 | 7.5 | 32.7 | 51.1 | 3.6 | do | 337 |
| 338 | 300 sulphate of potash, 150 sulphate of ammonia, 350 acid phosphate. *a c d e* | 58.60 | 1.97 | 3.49 | 14.08 | 20.48 | 1.38 | 4.8 | 8.4 | 34.0 | 49.5 | 3.3 | do | 338 |
| 339 | 300 sulphate of potash, 350 acid phosphate. *a c d e* | 59.13 | 2.14 | 3.58 | 13.95 | 19.71 | 1.49 | 5.2 | 8.8 | 34.1 | 48.3 | 3.6 | do | 339 |
| 340 | 150 sulphate of ammonia *a c d e* | 57.32 | 1.85 | 3.41 | 13.92 | 22.39 | 1.11 | 4.3 | 8.0 | 32.6 | 52.5 | 2.6 | do | 340 |
| 341 | 150 sulphate of ammonia, 350 acid phosphate. *a c d e* | 56.27 | 2.12 | 3.36 | 13.52 | 23.40 | 1.33 | 4.8 | 7.7 | 30.9 | 53.5 | 3.1 | do | 341 |
| 342 | 150 sulphate of ammonia, 350 acid phosphate, 350 lime. *a c d e* | 54.98 | 1.93 | 3.52 | 14.12 | 24.08 | 1.37 | 4.3 | 7.8 | 31.4 | 53.4 | 3.1 | do | 342 |
| 343 | 300 sulphate of potash, 150 sulphate of ammonia, 350 lime. *a c d e* | 57.19 | 2.06 | 3.17 | 12.99 | 23.38 | 1.21 | 4.8 | 7.4 | 30.3 | 54.7 | 2.8 | do | 343 |
| 344 | 300 sulphate of potash, 150 sulphate of ammonia, 350 acid phosphate, 350 lime. *a c d e* | 55.91 | 2.28 | 3.64 | 13.49 | 23.26 | 1.42 | 5.2 | 8.3 | 30.6 | 52.7 | 3.2 | do | 344 |
| 345 | 150 sulphate of ammonia, 350 lime, 550 gypsum. *a c d e* | 56.14 | 2.23 | 3.37 | 14.15 | 22.55 | 1.56 | 5.1 | 7.7 | 32.3 | 51.3 | 3.6 | do | 345 |
| 346 | 300 sulphate of potash, 150 sulphate of ammonia, 350 acid phosphate, 550 gypsum. *a c d e* | 55.79 | 2.28 | 3.73 | 14.11 | 22.60 | 1.49 | 5.2 | 8.4 | 31.9 | 51.2 | 3.3 | do | 346 |
| 347 | 350 lime *a c d e* | 60.18 | 2.09 | 3.06 | 12.83 | 20.56 | 1.28 | 5.3 | 7.7 | 32.2 | 51.6 | 3.2 | do | 347 |
| 348 | 550 gypsum *a c d e* | 58.38 | 2.06 | 2.91 | 13.20 | 22.29 | 1.16 | 5.0 | 7.0 | 31.7 | 53.5 | 2.8 | do | 348 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 349 | Nothing *a c d e* | 59.85 | 2.22 | 3.26 | 12.30 | 21.14 | 1.23 | 5.5 | 8.1 | 30.7 | 52.6 | 3.1 | ....do | 349 |
| 350 | 100 salt *a c d e* | 59.36 | 2.24 | 3.68 | 12.65 | 20.59 | 1.49 | 5.5 | 9.1 | 31.1 | 50.6 | 3.7 | ....do | 350 |
| 351 | 180 nitrate of soda *a c d e* | 57.14 | 2.12 | 3.40 | 13.58 | 22.39 | 1.37 | 5.0 | 7.9 | 31.7 | 52.2 | 3.2 | ....do | 351 |
| 352 | 150 sulphate of ammonia *a c d e* | 59.91 | 2.07 | 2.78 | 12.50 | 21.33 | 1.41 | 5.1 | 6.9 | 31.2 | 53.3 | 3.5 | ....do | 352 |
| 353 | 150 muriate of potash *a c d e* | 59.77 | 2.23 | 3.14 | 12.74 | 20.84 | 1.28 | 5.5 | 7.8 | 31.7 | 51.9 | 3.1 | ....do | 353 |
| 354 | 300 sulphate of potash *a c d e* | 58.59 | 2.00 | 2.95 | 12.54 | 22.50 | 1.42 | 4.8 | 7.1 | 30.3 | 54.4 | 3.4 | ....do | 354 |
| 355 | 50 ferrous sulphate *a c d e* | 56.03 | 1.99 | 3.27 | 14.05 | 23.03 | 1.63 | 4.5 | 7.4 | 32.0 | 52.4 | 3.7 | Mass. State Sta. Rep., 1885, p. 55 | 355 |
| | All analyses — Maximum | 78.70 | 3.19 | 3.79 | 19.35 | 28.56 | 2.03 | 10.5 | 14.1 | 37.7 | 61.1 | 6.1 | | |
| | All analyses — Minimum | 46.98 | 1.36 | 1.34 | 5.08 | 10.12 | 0.59 | 3.6 | 4.7 | 19.9 | 47.2 | 1.8 | | |
| | All analyses — Average | **61.58** | **2.10** | **3.06** | **11.77** | **20.30** | **1.19** | **5.4** | **8.0** | **30.7** | **52.8** | **3.1** | | |
| | Average composition, before bloom, headed, 3 analyses.† | **69.26** | **2.27** | **3.35** | **8.32** | **15.79** | **1.01** | **7.7** | **11.3** | **26.3** | **50.9** | **3.8** | | |
| | Average composition, in full bloom, 14 analyses.‡ | **65.09** | **1.98** | **2.79** | **10.42** | **18.70** | **1.02** | **5.7** | **7.9** | **29.9** | **53.6** | **2.9** | | |
| | Average composition, soon after bloom, 5 analyses.§ | **59.38** | **2.30** | **2.88** | **12.55** | **21.63** | **1.26** | **5.7** | **7.1** | **30.9** | **53.2** | **3.1** | | |
| | Average composition, in seed, nearly ripe, 4 analyses.‖ | **62.34** | **2.15** | **2.50** | **11.54** | **20.42** | **1.05** | **5.7** | **6.6** | **30.7** | **54.2** | **2.8** | | |
| | Pearl millet (*Penicillaria spicata*): | | | | | | | | | | | | | |
| 356 | Seeded May 16, in drills 3½ feet apart; cut Sept. 10; unfertilized. *h* | 77.21 | 1.61 | 1.86 | 7.81 | 11.30 | 0.21 | 7.1 | 8.1 | 34.3 | 49.6 | 0.9 | ....do | 356 |
| 357 | Seeded May 16, in drills 3½ feet apart; cut Sept. 10; fertilized. *h* | 76.37 | 1.58 | 1.86 | 8.11 | 11.73 | 0.35 | 6.7 | 7.9 | 34.3 | 49.6 | 1.5 | ....do | 357 |
| | Average | **76.79** | **1.59** | **1.86** | **7.96** | **11.52** | **0.28** | **6.9** | **8.0** | **34.3** | **49.6** | **1.2** | | |
| | English blue grass, wire grass (*Poa compressa*): | | | | | | | | | | | | | |
| 358 | Cut June 1, panicle not out; poor soil *a* | 67.90 | 2.49 | 3.43 | 5.84 | 18.64 | 1.70 | 7.8 | 10.7 | 18.2 | 58.0 | 5.3 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 135. | 358 |
| 359 | Cut June 1, panicle well out; poor soil *a* | 68.70 | 2.13 | 3.85 | 6.67 | 17.27 | 1.38 | 6.8 | 12.3 | 21.3 | 55.2 | 4.4 | ....do | 359 |
| 360 | Cut June 17, in bloom; poor soil *a* | 70.70 | 1.78 | 3.72 | 5.43 | 17.05 | 1.32 | 6.1 | 12.7 | 18.5 | 58.2 | 4.5 | ....do | 360 |
| 361 | Cut June 23, after bloom; poor soil *a* | 51.80 | 2.47 | 4.33 | 8.75 | 30.79 | 1.86 | 5.1 | 9.0 | 18.2 | 63.8 | 3.9 | ....do | 361 |
| 362 | Cut before heading | 69.73 | 3.43 | 10.09 | 5.49 | 9.32 | 1.94 | 11.4 | 30.3 | 18.1 | 30.8 | 6.4 | Ky. State Col. Bul. 5, 1885, p. 24 | 362 |
| | Wood meadow grass (*Poa nemoralis*): | | | | | | | | | | | | | |
| 363 | Cut June 16, 1888, in full bloom *a b* ¶ | 64.33 | 1.91 | 3.66 | 12.04 | 16.98 | 1.08 | 5.4 | 10.3 | 33.8 | 47.5 | 3.0 | Conn. State Sta. Rep., 1888, p. 101 | 363 |
| 364 | Cut 1889, in full bloom *a b* ¶ | 66.57 | 1.67 | 2.32 | 11.62 | 17.03 | 0.79 | 5.0 | 6.9 | 34.8 | 51.0 | 2.3 | Conn. State Sta. Rep., 1889, p. 248 | 364 |
| | Average | **65.45** | **1.79** | **2.99** | **11.83** | **17.01** | **0.93** | **5.2** | **8.7** | **34.3** | **49.1** | **2.7** | | |
| | Kentucky blue grass, June grass (*Poa pratensis*): | | | | | | | | | | | | | |
| 365 | Cut Apr. 23, panicle just visible *a* ** | 76.70 | 1.88 | 4.64 | 4.30 | 11.34 | 1.14 | 8.1 | 19.9 | 18.4 | 48.7 | 4.9 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 135. | 365 |
| 366 | Cut May 1, panicle spreading *a* ** | 70.80 | 1.61 | 4.74 | 6.67 | 14.99 | 1.19 | 5.5 | 16.2 | 22.8 | 51.4 | 4.1 | ....do | 366 |
| 367 | Cut May 21, in full bloom *a* ** | 71.90 | 2.33 | 3.54 | 6.68 | 14.45 | 1.10 | 8.3 | 12.6 | 23.8 | 51.4 | 3.9 | ....do | 367 |

* From same plat.
† Nos. 300, 310, 316.
‖ Nos. 303, 307, 313, 324.
‡ Nos. 301, 305, 314, 315, 317, 322, 325, 327, 329, 331, 332, 333, 334.
§ Nos. 302, 306, 318, 319, 323.
¶ Grown on same soil.
** Grown on good soil.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GREEN FODDER—Continued. | | | | | | | | | | | | | |
| | GRASSES—continued. | | | | | | | | | | | | | |
| | Kentucky blue grass, June grass (*Poa pratensis*)—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 368 | Cut June 5, in seed *a* * | 55.90 | 2.81 | 5.51 | 10.74 | 23.17 | 1.87 | 6.4 | 12.5 | 24.3 | 52.5 | 4.3 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 135. | 368 |
| 369 | Cut May 8, in full bloom *a* † | 69.00 | 2.18 | 2.42 | 7.90 | 17.62 | 0.88 | 7.0 | 7.8 | 25.5 | 56.8 | 2.9 | do | 369 |
| 370 | Cut June 1, after bloom; brown *a* ‡ | 55.40 | 3.22 | 3.96 | 10.64 | 25.03 | 1.75 | 7.2 | 8.9 | 23.9 | 56.1 | 3.9 | do | 370 |
| 371 | Cut May 19, in full bloom *a* † | 66.20 | 2.62 | 3.53 | 7.81 | 18.69 | 1.15 | 7.7 | 10.4 | 23.1 | 55.4 | 3.4 | do | 371 |
| 372 | Cut June 8, in seed; brown *a* ‡ | 54.60 | 2.81 | 3.34 | 11.05 | 26.61 | 1.59 | 6.2 | 7.4 | 24.3 | 58.6 | 3.5 | do | 372 |
| 373 | Not headed, 5 inches high | 82.53 | 1.59 | 4.59 | 3.78 | 6.50 | 1.01 | 9.1 | 26.3 | 21.6 | 37.2 | 5.8 | Ky. State Col. Bul. 5, 1885, p. 23 | 373 |
| 374 | Well headed, before blossom | 59.85 | 3.66 | 7.18 | 12.80 | 14.90 | 1.61 | 9.1 | 17.9 | 31.9 | 37.1 | 4.0 | Ky. State Col. Bul. 5, 1885, p. 24 | 374 |
| 375 | Cut June 11, in full bloom *a b* | 75.70 | 1.57 | 2.75 | 8.05 | 11.18 | 0.75 | 6.5 | 11.3 | 33.1 | 46.0 | 3.1 | Conn. State Ex. Sta. Rep., 1888, p. 101 | 375 |
| 376 | Time of cutting unknown | 58.76 | 2.03 | 3.18 | 13.29 | 21.27 | 1.47 | 4.9 | 7.7 | 32.2 | 51.6 | 3.6 | N. Y. State Ex. Sta. Rep., 1888, p. 237 | 376 |
| 377 | Cut Apr. 28; 3 to 6 inches high; old sod *a* | 68.05 | 3.67 | 5.76 | 7.09 | 13.66 | 1.77 | 11.5 | 18.0 | 22.2 | 42.7 | 5.6 | Iowa Ex. Sta. Bul. 10, 1890 | 377 |
| 378 | Cut May 8; 8 inches high; old sod *a* | 66.71 | 3.55 | 4.52 | 7.57 | 16.27 | 1.38 | 10.7 | 13.5 | 22.7 | 48.9 | 4.2 | do | 378 |
| 379 | Cut May 18; panicle spreading; old sod *a* | 63.30 | 3.21 | 4.08 | 8.94 | 19.04 | 1.43 | 8.7 | 11.1 | 24.4 | 51.9 | 3.9 | do | 379 |
| 380 | Cut May 28; early bloom; old sod *a* | 62.91 | 3.14 | 3.59 | 10.80 | 18.72 | 0.84 | 8.5 | 9.7 | 29.1 | 50.5 | 2.2 | do | 380 |
| 381 | Cut June 7; after bloom; old sod *a* | 61.24 | 3.36 | 3.06 | 11.60 | 19.70 | 1.06 | 8.7 | 7.9 | 29.9 | 51.8 | 2.7 | do | 381 |
| 382 | Cut July 5; in seed; brown *a* | 51.67 | 4.82 | 3.81 | 14.77 | 23.46 | 1.47 | 10.0 | 7.9 | 30.5 | 48.5 | 3.1 | do | 382 |
| | All analyses—Maximum | 82.53 | 4.82 | 7.18 | 14.77 | 26.61 | 1.87 | 11.5 | 26.3 | 32.2 | 58.6 | 5.8 | | |
| | All analyses—Minimum | 51.67 | 1.57 | 2.42 | 3.78 | 6.50 | 0.75 | 4.9 | 7.4 | 18.4 | 37.1 | 2.2 | | |
| | All analyses—Average | **65.07** | **2.78** | **4.12** | **9.14** | **17.59** | **1.30** | **8.0** | **11.8** | **26.2** | **50.3** | **3.7** | | |
| | Average, headed, **not** in bloom, 3 analyses.§ | **64.65** | **2.83** | **5.33** | **9.47** | **16.31** | **1.41** | **8.0** | **15.1** | **26.8** | **46.1** | **4.0** | | |
| | Average, in bloom, 5 analyses.‖ | **69.14** | **2.37** | **3.17** | **8.25** | **16.13** | **0.94** | **7.7** | **10.3** | **26.7** | **52.3** | **3.0** | | |
| | Average, after bloom, in seed, 4 analyses.¶ | **54.39** | **3.42** | **4.15** | **11.80** | **24.57** | **1.67** | **7.5** | **9.1** | **25.8** | **53.9** | **3.7** | | |
| | Pigeon grass, foxtail (*Setaria glauca*): | | | | | | | | | | | | | |
| 383 | Cut July 1, very young *a* | 74.20 | 2.80 | 4.39 | 5.59 | 12.42 | 0.60 | 10.8 | 17.0 | 21.7 | 48.1 | 2.3 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 136. | 383 |
| 384 | Cut July 24, early bloom *a* | 68.40 | 2.29 | 2.86 | 8.14 | 17.47 | 0.84 | 7.3 | 9.0 | 25.8 | 55.3 | 2.7 | do | 384 |
| | Hungarian grass, German millet, (*Setaria italica*): | | | | | | | | | | | | | |
| 385 | Cut July 17; heads partly filled *h* | 78.26 | 1.87 | 2.79 | 7.55 | 9.08 | 0.45 | 8.6 | 12.8 | 34.7 | 41.9 | 2.0 | Conn. State (Middletown) Ex. Sta. Rep., 1877–'78, p. 34. | 385 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 386 | Cut Aug. 3; heads well filled; seed soft *h* | 71.74 | 1.45 | 2.72 | 9.34 | 14.23 | 0.52 | 5.1 | 9.6 | 33.1 | 50.4 | 1.8 | ....do | 386 |
| 387 | Cut Aug. 18; heads ripe; seed hard *h* | 70.15 | 1.89 | 2.05 | 10.37 | 15.03 | 0.51 | 6.3 | 6.9 | 34.7 | 50.4 | 1.7 | ....do | 387 |
| 388 | Cut July 24, in bloom *a h* | 62.70 | 2.16 | 3.22 | 10.78 | 20.08 | 1.06 | 5.8 | 8.6 | 28.9 | 53.9 | 2.8 | Pa. Ex. Sta. Rep., 1887, p. 133 | 388 |
| 389 | Cut Sept 7 | 72.43 | 1.19 | 4.73 | 8.18 | 12.33 | 1.14 | 4.3 | 17.1 | 29.6 | 44.9 | 4.1 | Vt. Ex. Sta. Rep., 1888, p. 74 | 389 |
| 390 | Golden millet, Mean's grass, cut July 24, before bloom *a h* | 72.05 | 2.56 | 3.75 | 6.63 | 14.23 | 0.78 | 9.2 | 13.4 | 23.7 | 50.9 | 2.8 | Pa. Ex. Sta. Rep., 1887, p. 133 | 390 |
| | Johnson grass (*Sorghum halepense*): | | | | | | | | | | | | | |
| 391 | Cut Sept. 5; seeds formed but not ripe | 68.62 | 1.74 | 2.89 | 9.37 | 16.44 | 0.94 | 5.5 | 9.2 | 29.9 | 52.4 | 3.0 | Conn. State Ex. Sta. Rep., 1887 p. 103 | 391 |
| 392 | Time of cutting unknown; 6 to 7 feet high *a* | 62.00 | 1.58 | 1.82 | 14.25 | 19.42 | 0.93 | 4.2 | 4.8 | 37.5 | 51.1 | 2.4 | Md. Ex. Sta. Rep., 1888, p. 68 | 392 |
| 393 | Cut June 2; in full bloom *a h i j* | 80.15 | 1.26 | 2.41 | 4.45 | 11.11 | 0.59 | 6.4 | 12.3 | 22.4 | 55.9 | 3.0 | S. C. Ex. Sta. Rep., 1888, p. 132 | 393 |
| 394 | Broom grass (*Andropogon dissitiflorus*), cut Sept. 9; grown on poor soil. *a b c* | 64.50 | 1.24 | 2.20 | 13.03 | 18.30 | 0.73 | 3.5 | 6.2 | 36.6 | 51.6 | 2.1 | Conn. State Ex. Sta. Rep., 1887, p. 103 | 394 |
| 395 | Blue stem, finger-spiked broom grass (*Andropogon provincialis*), cut Sept. 9; rowen; headed but not in bloom. *a b c* | 73.09 | 1.58 | 2.15 | 8.51 | 14.05 | 0.62 | 5.9 | 8.2 | 31.5 | 52.1 | 2.3 | ....do | 395 |
| 396 | Broom grass (*Andropogon scoparius*), cut Sept. 9; grown on poor soil. *a b c* | 57.08 | 1.72 | 1.74 | 16.21 | 22.64 | 0.61 | 4.0 | 4.1 | 37.8 | 52.7 | 1.4 | ....do | 396 |
| 397 | Chess, cheat (*Bromus secalinus*) | 60.35 | 1.85 | 3.17 | 13.05 | 20.46 | 1.12 | 4.7 | 8.0 | 32.9 | 51.6 | 2.8 | N. Y. State Ex. Sta. Rep., 1886, p. 365 | 397 |
| 398 | Indian grass, wild oats (*Chrysopogon nutans*), cut Sept. 9; rowen; headed but not in bloom. *a b c* | 67.01 | 2.86 | 2.42 | 9.96 | 17.00 | 0.75 | 8.7 | 7.3 | 30.4 | 51.3 | 2.3 | Conn. State Ex. Sta. Rep., 1887, p. 103 | 398 |
| 399 | Bermuda grass (*Cynodon dactylon*), cut June 16; in bloom. *a* | 71.70 | 2.00 | 2.15 | 5.89 | 17.31 | 0.95 | 7.1 | 7.6 | 20.8 | 61.1 | 3.4 | S. C. Ex. Sta. Rep., 1888, p. 124 | 399 |
| 400 | Nerved meadow grass (*Glyceria nervata*), cut in bloom. *a b* | 74.88 | 1.83 | 2.64 | 8.41 | 11.75 | 0.49 | 7.3 | 10.4 | 33.5 | 46.8 | 2.0 | Conn. State Ex. Sta. Rep., 1887, p. 103 | 400 |
| 401 | Redtop panic (*Panicum agrostoides*), cut Sept. 9. *a b* | 65.01 | 3.55 | 2.42 | 10.44 | 17.93 | 0.65 | 10.1 | 6.9 | 29.8 | 51.4 | 1.8 | ....do | 401 |
| 402 | Barnyard grass (*Panicum crus-galli*, var. *hispidum*), cut Sept. 5; seed formed but not ripe. *a b c* | 80.52 | 1.43 | 1.42 | 6.75 | 9.54 | 0.34 | 7.3 | 7.3 | 34.7 | 48.9 | 1.8 | ....do | 402 |
| 403 | Tall panic (*Panicum virgatum*), cut Sept. 9; rowen; headed but not in bloom. *a b c* | 65.16 | 1.94 | 3.67 | 10.40 | 17.99 | 0.84 | 5.6 | 10.5 | 29.8 | 51.7 | 2.4 | ....do | 403 |
| 404 | Reed canary grass (*Phalaris arundinacea*) | 65.23 | 2.47 | 3.65 | 10.33 | 16.98 | 1.34 | 7.1 | 10.5 | 29.7 | 48.9 | 3.8 | N. Y. State Ex. Sta. Rep., 1886, p. 365 | 404 |
| 405 | Rough-stalked meadow grass (*Poa trivialis*), cut June 11; in full bloom. | 72.79 | 1.73 | 2.67 | 8.24 | 13.74 | 0.83 | 6.3 | 9.8 | 30.3 | 50.6 | 3.0 | Conn. State Ex. Sta. Rep., 1888, p. 101 | 405 |
| 406 | Teosinte (*Euchlæna luxurians*) | 66.77 | 3.97 | 2.54 | 12.33 | 13.60 | 0.79 | 12.0 | 7.7 | 37.1 | 40.8 | 2.4 | Miss. Ex. Sta. Bul. 8, 1889 | 406 |
| 407 | Smut grass (*Sporobolus indicus*), cut June 4; in full bloom. *a h i j* | 74.02 | 2.01 | 3.14 | 5.20 | 14.30 | 1.24 | 7.8 | 12.1 | 20.0 | 55.3 | 4.8 | S. C. Ex. Sta. Rep., 18-8, p. 132 | 407 |
| 408 | Porcupine grass, arrow grass (*Stipa spartea*) | 59.04 | 2.30 | 3.97 | 13.74 | 19.61 | 1.34 | 5.6 | 9.7 | 33.5 | 47.9 | 3.3 | N. Y. State Ex. Sta. Rep., 1886, p. 365 | 408 |
| | Pasture grass: | | | | | | | | | | | | | |
| 409 | Blue grass with considerable white clover. *a h i j* | 73.37 | 2.46 | 5.82 | 4.85 | 11.81 | 1.69 | 9.2 | 20.9 | 18.3 | 44.4 | 6.2 | Pa. Ex. Sta. Rep., 1886, p. 56 | 409 |
| 410 | Species unknown | 73.21 | 2.76 | 5.29 | 6.52 | 11.02 | 1.20 | 10.3 | 19.7 | 24.3 | 41.2 | 4.5 | Pa. Ex. Sta. Rep., 1886, p. 63 | 410 |
| 411 | Do | 75.77 | 2.65 | 3.68 | 6.76 | 10.11 | 1.03 | 10.9 | 15.2 | 27.9 | 41.7 | 4.3 | ....do | 411 |
| 412 | Rowen of mixed grasses | 73.48 | 2.00 | 3.51 | 10.45 | 9.58 | 0.98 | 7.5 | 13.3 | 39.4 | 36.1 | 3.7 | N. Y. State Ex. Sta. Rep., 1885, p. 302 | 412 |
| | LEGUMES. | | | | | | | | | | | | | |
| | Red clover (*Trifolium pratense*): | | | | | | | | | | | | | |
| 413 | Cut just before bloom *h* | 61.21 | 3.24 | 5.54 | 10.76 | 18.59 | 0.66 | 8.3 | 14.3 | 27.8 | 47.9 | 1.7 | Conn. State (Middletown) Sta. Rep., 1877–78, p. 32. | 413 |
| 414 | Cut in full bloom *h* | 47.13 | 4.04 | 7.13 | 14.69 | 25.75 | 1.26 | 7.7 | 13.5 | 27.8 | 48.6 | 2.4 | ....do | 414 |
| 415 | Cut when nearly out of bloom *h* | 64.72 | 2.60 | 4.63 | 10.54 | 16.88 | 0.63 | 7.3 | 13.1 | 29.9 | 47.9 | 1.8 | ....do | 415 |
| 416 | Cut when nearly ripe *h* | 61.05 | 2.54 | 4.03 | 12.36 | 19.08 | 0.94 | 6.5 | 10.4 | 31.8 | 48.9 | 2.4 | ....do | 416 |

* Grown on good soil. † Grown on poor soil. ‡ Grown on poor soil; wayside. § Nos. 366, 374, 379. ‖ Nos, 367, 369, 371, 375, 380. ¶ Nos. 368, 370, 372, 382.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GREEN FODDER—Continued. | | | | | | | | | | | | | |
| | LEGUMES—continued. | | | | | | | | | | | | | |
| | Red clover (*Trifolium pratense*)—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 417 | Cut Apr. 19; flower head invisible *a**..... | 82.80 | 1.60 | 4.56 | 1.89 | 7.84 | 1.31 | 9.3 | 26.5 | 11.0 | 45.6 | 7.6 | U. S. Dept. Agr. Rep., 1880, p. 151 ..... | 417 |
| 418 | Cut May 4; flower head well formed *a**..... | 82.70 | 1.54 | 4.38 | 2.25 | 8.13 | 1.00 | 8.9 | 25.5 | 13.1 | 46.7 | 5.8 | .....do ..... | 418 |
| 419 | Cut May 10; in full bloom *a*~..... | 79.90 | 1.67 | 3.85 | 3.20 | 10.42 | 0.96 | 8.3 | 19.1 | 15.9 | 51.9 | 4.8 | .....do ..... | 419 |
| 420 | Cut June 1; after bloom *a**..... | 74.20 | 1.87 | 4.67 | 5.14 | 12.93 | 1.19 | 7.3 | 18.1 | 19.9 | 50.1 | 4.6 | .....do ..... | 420 |
| 421 | Cut June 8; in seed *a**..... | 73.90 | 1.92 | 3.98 | 4.98 | 14.18 | 1.04 | 7.4 | 15.2 | 19.1 | 54.3 | 4.0 | .....do ..... | 421 |
| 422 | Cut June 23; flower head invisible *a* †..... | 82.30 | 1.97 | 4.68 | 2.47 | 7.88 | 0.70 | 11.2 | 26.4 | 13.9 | 44.5 | 4.0 | .....do ..... | 422 |
| 423 | Cut July 1; in full bloom *a* †..... | 73.40 | 2.37 | 5.53 | 4.21 | 13.46 | 1.03 | 8.9 | 20.8 | 15.8 | 50.6 | 3.9 | .....do ..... | 423 |
| 424 | Cut July 15; in seed *a* †..... | 63.70 | 2.44 | 5.48 | 6.48 | 20.19 | 1.71 | 6.7 | 15.1 | 17.9 | 55.6 | 4.7 | .....do ..... | 424 |
| 425 | Time of cutting unknown *b*..... | 73.33 | 2.16 | 4.09 | 8.12 | 11.61 | 0.69 | 8.1 | 15.3 | 30.4 | 43.6 | 2.6 | N. J. Ex. Sta. Rep., 1884, p. 106 ..... | 425 |
| 426 | Cut July 30; first cutting *b h* †§..... | 73.48 | 2.08 | 3.66 | 8.38 | 11.73 | 0.67 | 7.9 | 13.8 | 31.6 | 44.2 | 2.5 | N. J. Ex. Sta. Rep., 1885, p. 171 ..... | 426 |
| 427 | Cut Aug. 26; second cutting *b h* †§..... | 68.89 | 2.79 | 4.63 | 8.66 | 14.07 | 0.96 | 9.0 | 14.9 | 27.9 | 45.1 | 3.1 | .....do ..... | 427 |
| 428 | Time of cutting unknown ..... | 75.63 | 1.55 | 3.66 | 6.86 | 11.08 | 1.22 | 6.4 | 15.0 | 28.2 | 45.4 | 5.0 | N. Y. State Ex. Sta. Rep., 1886, p. 365.. | 428 |
| 429 | Do..... | 72.92 | 1.74 | 3.94 | 7.86 | 12.15 | 1.32 | 6.5 | 14.5 | 29.2 | 44.9 | 4.9 | N. Y. State Ex. Sta. Rep., 1887, p. 425.. | 429 |
| | Cut June 23, 1886 (fertilizers, pounds per acre)— | | | | | | | | | | | | | |
| 430 | 300 sulphate of potash *a c d e*..... | 67.45 | 1.98 | 4.54 | 9.19 | 15.50 | 1.34 | 6.1 | 13.9 | 28.2 | 47.7 | 4.1 | N. Y. State Ex. Sta. Rep., 1887, p. 444.. | 430 |
| 431 | 150 sulphate of ammonia *a c d e*..... | 65.97 | 2.15 | 4.44 | 10.35 | 15.80 | 1.29 | 6.3 | 13.1 | 30.4 | 46.4 | 3.8 | .....do ..... | 431 |
| 432 | 350 acid phosphate *a c d e*..... | 67.20 | 2.20 | 4.76 | 10.13 | 14.41 | 1.30 | 6.7 | 14.5 | 30.9 | 43.9 | 4.0 | .....do ..... | 432 |
| 433 | 300 sulphate of potash, 150 sulphate of ammonia, 350 acid phosphate. *a c d e* | 69.91 | 2.02 | 4.55 | 9.64 | 12.64 | 1.24 | 6.7 | 15.1 | 32.0 | 42.1 | 4.1 | .....do ..... | 433 |
| 434 | 300 sulphate of potash, 350 acid phosphate. *a c d e* | 69.77 | 2.05 | 4.38 | 9.04 | 13.50 | 1.26 | 6.8 | 14.5 | 29.9 | 44.6 | 4.2 | .....do ..... | 434 |
| 435 | 150 sulphate of ammonia *a d e*..... | 68.10 | 2.06 | 4.53 | 10.70 | 13.34 | 1.27 | 6.5 | 14.2 | 33.6 | 41.7 | 4.0 | .....do ..... | 435 |
| 436 | 150 sulphate of ammonia 350 acid phosphate. *a d e* | 65.83 | 2.15 | 5.06 | 11.31 | 15.26 | 1.39 | 6.3 | 14.8 | 30.2 | 44.6 | 4.1 | .....do ..... | 436 |
| 437 | 150 sulphate of ammonia, 350 acid phosphate, 350 lime. *a d e* | 67.43 | 2.06 | 4.82 | 9.78 | 14.44 | 1.27 | 6.3 | 14.8 | 30.0 | 45.0 | 3.9 | .....do ..... | 437 |
| 438 | 300 sulphate of potash, 150 sulphate of ammonia, 350 lime. *a d c* | 68.42 | 2.07 | 4.34 | 9.51 | 14.30 | 1.36 | 6.6 | 13.8 | 30.1 | 45.2 | 4.3 | .....do ..... | 438 |
| 439 | 300 sulphate of potash, 150 sulphate of ammonia, 350 lime, 350 acid phosphate. *a d e* | 71.15 | 1.89 | 4.34 | 8.46 | 13.01 | 1.15 | 6.6 | 15.1 | 29.3 | 45.0 | 4.0 | .....do ..... | 439 |
| 440 | 150 sulphate of ammonia, 350 lime, 550 gypsum. *a d e* | 70.10 | 1.99 | 4.30 | 8.68 | 13.98 | 0.97 | 6.7 | 14.4 | 29.0 | 46.7 | 3.2 | .....do ..... | 440 |
| 441 | 300 sulphate of potash, 150 sulphate of ammonia, 550 gypsum, 350 acid phosphate. *a d e* | 68.37 | 2.10 | 4.21 | 9.05 | 15.12 | 1.15 | 6.6 | 13.3 | 28.6 | 47.8 | 3.7 | .....do ..... | 441 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 442 | 350 lime *a d e* | 66.54 | 2.15 | 4.27 | 10.57 | 14.93 | 1.34 | 6.4 | 12.8 | 31.6 | 44.6 | 4.6 | ....do | 442 |
| 443 | 550 gypsum *a d e* | 68.64 | 2.03 | 4.00 | 9.83 | 14.24 | 1.24 | 6. | 12.8 | 31.4 | 45.4 | 3.9 | ....do | 443 |
| 444 | Nothing *a d e* | 71.02 | 1.80 | 3.80 | 8.83 | 13.38 | 1.17 | 6.2 | 13.1 | 30.5 | 46.2 | 4.0 | ....do | 444 |
| 445 | 100 salt *a d e* | 68.10 | 2.15 | 4.76 | 10.04 | 13.82 | 1.13 | 6.7 | 14.9 | 31.5 | 43.4 | 3.5 | ....do | 445 |
| 446 | 180 nitrate of soda *a d e* | 69.80 | 1.91 | 4.21 | 9.16 | 13.62 | 1.30 | 6.3 | 13.9 | 30.4 | 45.1 | 4.3 | ....do | 446 |
| 447 | 150 sulphate of ammonia *a d e* | 69.66 | 2.05 | 4.44 | 8.95 | 13.59 | 1.31 | 6.8 | 14.6 | 29.5 | 44.8 | 4.3 | ....do | 447 |
| 448 | 150 muriate of potash *a d e* | 66.37 | 2.26 | 5.63 | 10.84 | 13.45 | 1.45 | 6.7 | 16.8 | 32.3 | 39.9 | 4.3 | ....do | 448 |
| 449 | 300 sulphate of potash *a d e* | 66.80 | 2.12 | 4.67 | 10.94 | 13.71 | 1.76 | 6.4 | 14.1 | 33.0 | 41.2 | 5.3 | ....do | 449 |
| 450 | 50 ferrous sulphate *a d e* | 68.67 | 1.97 | 4.58 | 10.15 | 13.19 | 1.44 | 6.3 | 14.6 | 32.4 | 42.1 | 4.6 | ....do | 450 |
| 451 | Cut June 18; full bloom *a h i j* | 71.27 | 2.09 | 3.47 | 8.36 | 13.74 | 1.07 | 7.2 | 12.1 | 29.1 | 47.9 | 3.7 | Pa. Ex. Sta. Bul. 1, 1887 | 451 |
| 452 | Time of cutting unknown | 84.64 | 2.33 | 3.43 | 3.06 | 5.73 | 0.81 | 15.2 | 22.3 | 19.9 | 37.3 | 5.3 | Pa. Ex. Sta. Rep., 1888, p. 86 | 452 |
| 453 | First crop, cut in bloom *a h i j* | 91.78 | 0.86 | 1.71 | 1.82 | 3.49 | 0.34 | 10.4 | 20.8 | 22.2 | 42.5 | 4.1 | Wis. Ex. Sta. Rep., 1889, p. 210 | 453 |
| 454 | Second crop, cut when flower heads appeared. *a h i j* | 77.52 | 1.74 | 3.33 | 5.58 | 11.16 | 0.67 | 7.8 | 14.8 | 24.8 | 49.6 | 3.0 | ....do | 454 |
| 455 | Third crop, cut when flower heads appeared. *a h i j* | 72.51 | 1.98 | 4.37 | 6.57 | 13.52 | 1.05 | 7.2 | 15.9 | 23.9 | 49.2 | 3.8 | ....do | 455 |
| | All analyses — Maximum | 91.78 | 4.04 | 7.13 | 14.69 | 25.75 | 1.76 | 15.2 | 26.5 | 33.6 | 55.6 | 7.6 | | |
| | All analyses — Minimum | 47.13 | 0.86 | 1.71 | 1.82 | 3.49 | 0.34 | 6.1 | 10.4 | 11.0 | 37.4 | 1.7 | | |
| | All analyses — Average | **70.79** | **2.10** | **4.41** | **8.12** | **13.45** | **1.13** | **7.2** | **15.3** | **27.8** | **45.8** | **3.9** | | |
| | Average, before bloom, 2 analyses | **72.00** | **2.40** | **5.00** | **6.50** | **13.30** | **0.80** | **8.6** | **17.8** | **23.2** | **47.5** | **2.9** | | |
| | Average, in full bloom, 5 analyses.‖ | **72.70** | **2.20** | **4.30** | **6.50** | **13.40** | **0.90** | **8.1** | **15.7** | **23.8** | **49.2** | **3.2** | | |
| | Average, after bloom and in seed, 4 analyses.¶ | **68.20** | **2.20** | **4.50** | **7.20** | **16.70** | **1.26** | **6.9** | **14.2** | **22.6** | **52.5** | **3.8** | | |
| 456 | White clover (*Trifolium repens*) | 78.23 | 1.79 | 4.42 | 4.70 | 9.44 | 1.42 | 8.2 | 20.3 | 21.6 | 43.4 | 6.5 | N. Y. State Ex. Sta. Rep., 1886, p. 365 | 456 |
| 457 | Alsike clover (*Trifolium hybridum*) | 77.29 | 1.95 | 3.66 | 5.32 | 10.76 | 1.02 | 8.6 | 16.1 | 23.5 | 47.3 | 4.5 | ....do | 457 |
| 458 | In bloom; cut Aug. 2; sown preceding year, in drills 10 to 12 inches apart. *a* | 75.00 | 1.93 | 3.63 | 7.26 | 10.98 | 1.20 | 6.8 | 14.5 | 29.0 | 44.9 | 4.8 | Pa. Ex. Sta. Rep., 1887, p. 136 | 458 |
| 459 | In bloom | 72.26 | 2.09 | 4.23 | 9.35 | 11.22 | 0.85 | 7.5 | 15.3 | 33.7 | 40.4 | 3.1 | N. Y. State Ex. Sta. Rep., 1888, p. 237 | 459 |
| 460 | Do | 74.53 | 1.88 | 3.93 | 7.99 | 11.53 | 0.64 | 7.4 | 15.4 | 29.4 | 45.3 | 2.5 | ....do | 460 |
| | All analyses, excluding 456. — Maximum | 77.29 | 2.09 | 4.23 | 9.35 | 11.53 | 1.20 | 8.6 | 16.1 | 33.7 | 47.3 | 4.8 | | |
| | All analyses, excluding 456. — Minimum | 72.26 | 1.88 | 3.63 | 5.32 | 10.76 | 0.64 | 6.8 | 14.5 | 23.5 | 40.4 | 2.5 | | |
| | All analyses, excluding 456. — Average | **74.77** | **1.96** | **3.86** | **7.36** | **11.12** | **0.93** | **7.8** | **15.3** | **29.2** | **44.0** | **3.7** | | |
| | Alfalfa, lucern (*Medicago sativa*): | | | | | | | | | | | | | |
| 461 | Cut when young; no buds *a* | 80.40 | 2.27 | 5.77 | 2.54 | 8.20 | 0.82 | 11.6 | 29.5 | 12.9 | 41.8 | 4.2 | U. S. Dept. Agr. Rep., 1880, p. 152 | 461 |
| 462 | Cut before bloom *a* | 79.30 | 2.01 | 4.43 | 4.03 | 9.34 | 0.89 | 9.7 | 21.4 | 19.5 | 45.1 | 4.3 | ....do | 462 |
| 463 | Cut June 1; in bloom; aftermath | 70.10 | 2.00 | 5.03 | 6.66 | 15.36 | 0.85 | 6.7 | 16.9 | 22.3 | 51.3 | 2.8 | ....do | 463 |
| 464 | Time of cutting unknown | 75.01 | 2.15 | 4.07 | 8.68 | 9.45 | 0.64 | 8.6 | 16.3 | 34.7 | 37.8 | 2.6 | N. Y. State Ex. Sta. Rep., 1883, p. 150 | 464 |
| 465 | Do | 56.73 | 3.77 | 7.01 | 14.81 | 16.25 | 1.73 | 8.7 | 15.5 | 34.2 | 27.6 | 4.0 | N. Y. State Ex. Sta. Rep., 1886, p. 365 | 465 |
| 466 | Fourth cutting | 67.20 | 3.25 | 7.69 | 8.67 | 11.85 | 1.34 | 9.9 | 23.4 | 26.4 | 36.2 | 4.1 | ....do | 466 |
| 467 | First cutting, June 4 *b h*** | 79.43 | 1.92 | 4.13 | 5.84 | 8.14 | 0.54 | 9.3 | 20.0 | 28.4 | 39.7 | 2.6 | N. J. Ex. Sta. Rep., 1886, p. 171 | 467 |
| 468 | Second cutting, July 19 *b h* ** | 73.80 | 1.78 | 4.82 | 9.08 | 10.03 | 0.49 | 6.8 | 18.4 | 34.6 | 38.3 | 1.9 | ....do | 468 |

*First growth. †Aftermath. ‡From same field. §In *loc. cit.*, analyses and tonnage per acre compared with that of lucern.
‖ Nos. 414, 419, 420, 451, 453. ¶ Nos. 416, 420, 421, 424. ** In *loc. cit.*, analysis and yield compared with that of clover.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GREEN FODDER—Continued. | | | | | | | | | | | | | |
| | LEGUMES—continued. | | | | | | | | | | | | | |
| | Alfalfa, lucern (*Medicago sativa*)—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 469 | Third cutting, Sept. 11 *b h* * | 70.00 | 1.98 | 4.79 | 10.02 | 12.58 | 0.63 | 6.6 | 16.0 | 33.4 | 41.9 | 2.1 | N. J. Ex. Sta. Rep., 1886, p. 171 | 469 |
| 470 | First cutting, July 7 *b h* † | 79.60 | 2.04 | 3.59 | 5.61 | 8.38 | 0.77 | 10.0 | 17.6 | 27.5 | 41.1 | 3.8 | N. J. Ex. Sta. Rep., 1887, p. 164 | 470 |
| 471 | Second cutting, Aug. 18 *b h* † | 79.39 | 2.00 | 3.79 | 4.89 | 9.07 | 0.86 | 9.7 | 18.4 | 23.7 | 44.0 | 4.2 | do | 471 |
| 472 | Third cutting, Sept. 27 *b h* † | 82.03 | 2.16 | 4.07 | 3.03 | 7.87 | 0.84 | 12.0 | 22.6 | 16.8 | 43.9 | 4.7 | do | 472 |
| 473 | Cut June 11 *b h* ‡ | 76.39 | 2.10 | 4.00 | 7.10 | 9.68 | 0.73 | 8.9 | 17.0 | 30.1 | 40.9 | 3.1 | N. J. Ex. Sta. Rep., 1887, p. 168 | 473 |
| 474 | Cut July 28 *b h* ‡ | 71.56 | 2.00 | 4.90 | 8.69 | 11.83 | 1.02 | 7.0 | 17.1 | 30.6 | 41.7 | 3.6 | do | 474 |
| 475 | Cut Sept. 19 *b h* ‡ | 74.21 | 2.03 | 4.21 | 8.20 | 10.61 | 0.74 | 7.9 | 16.3 | 31.8 | 41.1 | 2.9 | do | 475 |
| 476 | Time of cutting unknown | 70.91 | 2.64 | 5.39 | 9.91 | 10.23 | 0.92 | 9.1 | 15.5 | 34.1 | 38.1 | 3.2 | N. Y. State Ex. Sta. Rep., 1887, p. 425 | 476 |
| 477 | Cut July 24; before bloom *a h i j* § | 73.34 | 2.70 | 5.12 | 7.98 | 10.15 | 0.71 | 10.1 | 19.2 | 29.9 | 38.1 | 2.7 | Pa. Ex. Sta. Rep., 1887, p. 135 | 477 |
| 478 | Cut Aug. 2; in bloom *a h i j* § | 70.83 | 2.48 | 3.50 | 7.66 | 14.88 | 0.65 | 8.5 | 12.0 | 26.3 | 51.0 | 2.2 | do | 478 |
| 479 | Cut Oct. 4; seed ripe *a h i j* § | 62.57 | 3.41 | 3.86 | 9.60 | 19.16 | 1.40 | 9.1 | 10.3 | 25.7 | 51.2 | 3.7 | do | 479 |
| 480 | Cut June 4; beginning to bud | 77.65 | 2.82 | 4.42 | 3.13 | 11.10 | 0.88 | 12.6 | 19.8 | 13.9 | 49.7 | 4.0 | Colo. Ex. Sta. Bul. 8, 1889 | 480 |
| 481 | Cut June 20; full bloom | 69.71 | 3.90 | 5.08 | 4.89 | 15.30 | 1.12 | 12.9 | 16.8 | 16.1 | 50.5 | 3.7 | do | 481 |
| 482 | Cut July 13; bloom half turned | 60.89 | 5.14 | 5.55 | 7.78 | 18.98 | 1.66 | 13.2 | 14.2 | 19.9 | 48.5 | 4.2 | do | 482 |
| 483 | Cut Sept. 11; seed fully ripe | 49.30 | 4.67 | 6.47 | 11.21 | 26.18 | 2.17 | 9.2 | 12.8 | 22.1 | 51.6 | 4.3 | do | 483 |
| | All analyses—Maximum | 82.03 | 5.14 | 7.69 | 14.81 | 26.18 | 2.17 | 13.2 | 29.5 | 34.7 | 51.6 | 4.7 | | |
| | All analyses—Minimum | 49.30 | 1.78 | 3.50 | 2.54 | 7.87 | 0.49 | 6.7 | 10.3 | 12.9 | 27.6 | 1.9 | | |
| | All analyses—Average | **71.75** | **2.66** | **4.84** | **7.39** | **12.39** | **0.97** | **9.4** | **17.1** | **26.2** | **43.9** | **3.4** | | |
| 484 | Black medick (*Medicago lupulina*) | 78.52 | 1.37 | 3.40 | 6.31 | 9.29 | 1.11 | 6.4 | 15.8 | 29.3 | 43.4 | 5.1 | Reference unknown | 484 |
| | Sainfoin, esparcette (*Onobrychis sativa*): | | | | | | | | | | | | | |
| 485 | Sown in drills 2 to 2½ feet apart; cut July 24; before bloom. *a* | 77.10 | 3.86 | 4.63 | 5.92 | 7.85 | 0.64 | 16.8 | 20.2 | 26.0 | 34.3 | 2.7 | Pa. Ex. Sta. Rep., 1887, p. 139 | 485 |
| 486 | Sown in drills 2 to 2½ feet apart; cut Aug. 2; in bloom. *a* | 73.22 | 2.09 | 3.60 | 4.87 | 15.20 | 1.02 | 7.8 | 13.4 | 18.2 | 56.7 | 3.9 | do | 486 |
| | Serradella (*Ornithopus sativus*): | | | | | | | | | | | | | |
| 487 | In bloom | 84.60 | 1.82 | 2.73 | 4.04 | 6.40 | 0.41 | 11.9 | 17.8 | 26.2 | 41.4 | 2.7 | Mass. State Ex. Sta. Rep., 1887, p. 194 | 487 |
| 488 | Time of cutting unknown | 80.14 | 2.28 | 2.42 | 7.70 | 7.04 | 0.42 | 11.5 | 12.2 | 38.8 | 35.4 | 2.1 | Mass. State Ex. Sta. Rep., 1887, p. 51 | 488 |
| 489 | Cut Sept. 20 *h* | 80.58 | 2.24 | 2.33 | 7.53 | 6.91 | 0.41 | 11.5 | 12.0 | 38.8 | 35.6 | 2.1 | Mass. State Ex. Sta. Rep., 1887, p. 138 | 489 |
| 490 | Cut July 24; before bloom *a h i j* ‖ | 85.79 | 5.78 | 2.14 | 1.96 | 3.93 | 0.40 | 40.7 | 15.0 | 13.8 | 27.7 | 2.8 | Pa. Ex. Sta. Rep., 1887, p. 142 | 490 |
| 491 | Cut Aug. 2; in bloom *a h i j* ‖ | 79.85 | 3.12 | 2.87 | 3.45 | 9.95 | 0.74 | 15.4 | 14.3 | 17.2 | 49.4 | 3.7 | do | 491 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 492 | Cut Oct. 4; seed ripe; also still blooming. *a h i j* ‖ | 65.60 | 4.16 | 3.55 | 7.78 | 17.08 | 1.83 | 12.1 | 10.3 | 22.6 | 49.7 | 5.3 | ....do | 492 |
| 493 | Bokhara clover (*Melilotus alba*) | 69.20 | 1.61 | 3.52 | 13.12 | 11.45 | 1.10 | 5.2 | 11.4 | 42.6 | 37.2 | 3.6 | N. Y. State Ex. Sta. Rep., 1886, p. 365 | 493 |
| 494 | Second crop; before bloom | 80.55 | 1.27 | 3.04 | 6.79 | 7.22 | 1.13 | 6.5 | 15.6 | 34.9 | 37.2 | 5.8 | ....do | 494 |
| 495 | Cut July 24 *a h i j* ¶ | 80.48 | 2.25 | 4.15 | 3.62 | 8.55 | 0.95 | 11.5 | 21.2 | 18.7 | 43.8 | 4.8 | Pa. Ex. Sta. Rep., 1887, p. 137 | 495 |
| 496 | Cut Aug. 2 *a h i j* ¶ | 76.01 | 1.80 | 2.77 | 6.56 | 12.07 | 0.79 | 7.5 | 11.6 | 27.3 | 50.3 | 3.3 | ....do | 496 |
| 497 | Cut Oct. 4 *a h i j* ¶ | 68.60 | 2.36 | 2.45 | 9.50 | 16.11 | 0.98 | 7.5 | 7.8 | 30.3 | 51.3 | 3.1 | ....do | 497 |
| 498 | In bloom *c* | 76.52 | 1.62 | 2.77 | 6.59 | 12.06 | 0.44 | 6.9 | 11.8 | 28.1 | 51.4 | 1.8 | Mass. State Ex. Sta. Rep., 1889, p. 180 | 498 |
| 499 | White lupine (*Lupinus albus*), in bloom | 85.35 | 0.74 | 2.75 | 4.56 | 6.25 | 0.35 | 5.1 | 18.8 | 31.1 | 42.6 | 2.4 | Mass. State Ex. Sta. Rep., 1885, p. 68 | 499 |
| | Vetch (*Vicia sativa*): | | | | | | | | | | | | | |
| 500 | Cut Apr. 23; no sign of bloom *a* | 87.10 | 1.66 | 4.77 | 1.54 | 4.39 | 0.54 | 12.9 | 37.0 | 11.9 | 34.0 | 4.2 | U. S. Dept. Agr. Rep., 1880, p. 152 | 500 |
| 501 | Cut May 4; in full bloom *a* | 86.20 | 1.60 | 4.14 | 2.11 | 5.34 | 0.61 | 11.6 | 30.0 | 15.3 | 38.7 | 4.4 | ....do | 501 |
| 502 | Cut May 21; in bloom and seed *a* | 83.90 | 2.00 | 4.04 | 3.24 | 6.19 | 0.63 | 12.4 | 25.1 | 20.1 | 38.5 | 3.9 | ....do | 502 |
| 503 | Cut Apr. 21; in full bloom *a h i j* | 85.54 | 1.46 | 4.14 | 2.53 | 5.74 | 0.59 | 10.1 | 28.6 | 17.5 | 39.7 | 4.1 | S. C. Ex. Sta. Rep., 1888, p. 130 | 503 |
| 504 | Cut May 7; pods half developed *a h i j* | 76.44 | 2.13 | 4.74 | 4.48 | 11.38 | 0.83 | 9.0 | 20.1 | 19.0 | 48.4 | 3.5 | ....do | 504 |
| | Vetch with oats: | | | | | | | | | | | | | |
| 505 | One fourth vetch and three fourths oats sown. *h* | 86.11 | 1.72 | 1.47 | 4.75 | 5.58 | 0.37 | 12.4 | 10.6 | 34.2 | 40.1 | 2.7 | Mass. State Ex. Sta. Rep., 1887, p. 136 | 505 |
| 506 | Dry crop contained one tenth vetch and nine tenths oats. *c* | 73.36 | 3.30 | 2.82 | 9.11 | 10.68 | 0.73 | 12.4 | 10.6 | 34.2 | 40.1 | 2.7 | Mass. State Ex. Sta. Rep., 1887, p. 50 | 506 |
| 507 | Proportion of vetch and oats unknown | 74.02 | 1.92 | 2.80 | 9.30 | 11.37 | 0.59 | 7.4 | 10.8 | 35.8 | 43.7 | 2.3 | Mass. State Ex. Sta. Rep., 1888, p. 50 | 507 |
| | Russian or hairy vetch (*Vicia villosa*): | | | | | | | | | | | | | |
| 508 | Cut July 24, before bloom *a h* ** | 82.88 | 2.25 | 3.13 | 4.57 | 6.75 | 0.42 | 13.1 | 18.3 | 26.7 | 39.5 | 2.4 | Pa. Ex. Sta. Rep., 1887, p. 140 | 508 |
| 509 | Cut Aug. 2, in bloom *a h* ** | 68.22 | 3.50 | 4.12 | 8.70 | 14.61 | 0.85 | 11.0 | 12.9 | 27.4 | 46.0 | 2.7 | ....do | 509 |
| 510 | Cut Oct. 4; seed ripe; and also still blooming. *a h* ** | 68.70 | 2.41 | 5.16 | 7.73 | 14.73 | 1.27 | 7.7 | 16.5 | 24.7 | 47.0 | 4.1 | ....do | 510 |
| 511 | Time of cutting unknown | 78.01 | 1.84 | 4.31 | 7.01 | 8.56 | 0.27 | 8.4 | 19.6 | 31.9 | 38.9 | 1.2 | Mass. State Ex. Sta. Rep., 1889, p. 180 | 511 |
| | Cowpea (*Dolichos*): | | | | | | | | | | | | | |
| 512 | Equal parts of black and yellow varieties | 72.80 | 2.00 | 1.85 | 15.27 | 7.86 | 0.21 | 7.4 | 6.8 | 56.1 | 28.9 | 0.8 | N. C. Ex. Sta. Rep., 1879, p. 115 | 512 |
| 513 | Green and succulent | 86.03 | 1.89 | 3.25 | 2.87 | 5.34 | 0.62 | 13.5 | 23.3 | 20.5 | 38.3 | 4.4 | N. Y. State Ex. Sta. Rep., 1883, p. 18 | 513 |
| 514 | Do | 82.10 | 1.77 | 3.00 | 4.09 | 8.46 | 0.58 | 9.9 | 16.8 | 22.8 | 47.3 | 3.2 | ....do | 514 |
| 515 | Do. *c* | 80.62 | 1.16 | 1.66 | 4.46 | 11.75 | 0.35 | 6.0 | 8.6 | 23.0 | 60.6 | 1.8 | Mass. State Ex. Sta. Rep., 1887, p. 50 | 515 |
| 516 | Var. Clay, sown May 25, in drills; cut Sept. 2 | 78.81 | 1.27 | 1.76 | 4.88 | 12.90 | 0.38 | 6.0 | 8.3 | 23.0 | 60.9 | 1.8 | Mass. State Ex. Sta. Rep., 1887, p. 139 | 516 |
| 517 | Do | 80.45 | 1.45 | 3.51 | 5.06 | 9.02 | 0.51 | 7.4 | 18.0 | 25.9 | 46.1 | 2.6 | Mass. State Ex. Sta. Rep., 1888, p. 51 | 517 |
| 518 | Cut Aug. 21; planted in spring same year *h* | 85.30 | 2.65 | 3.06 | 3.12 | 5.38 | 0.49 | 18.0 | 20.8 | 21.2 | 36.7 | 3.3 | Wis. Ex. Sta. Rep., 1888, p. 140 | 518 |
| 519 | Time of cutting unknown | 93.09 | 1.70 | 1.52 | 1.71 | 1.76 | 0.22 | 24.7 | 22.0 | 24.8 | 25.3 | 3.2 | Md. Ex. Sta. Rep., 1888, p. 68 | 519 |
| 520 | Do. *a* | 87.13 | 1.75 | 1.97 | 3.41 | 5.29 | 0.45 | 13.6 | 15.2 | 26.5 | 41.3 | 3.4 | ....do | 520 |
| 521 | Do. *a* | 89.18 | 1.78 | 1.99 | 2.95 | 3.66 | 0.44 | 16.5 | 18.4 | 27.4 | 33.6 | 4.1 | ....do | 521 |
| | Maximum | 93.09 | 2.65 | 3.51 | 15.27 | 12.90 | 0.62 | 24.7 | 23.3 | 56.1 | 60.9 | 4.4 | | |
| | Minimum | 72.80 | 1.16 | 1.52 | 1.71 | 1.76 | 0.21 | 6.0 | 6.8 | 20.5 | 25.3 | 0.8 | | |
| | Average | 83.55 | 1.74 | 2.36 | 4.78 | 7.14 | 0.43 | 10.5 | 14.3 | 29.0 | 43.6 | 2.6 | | |
| 522 | Soja bean (*Soja hispida*) | 69.35 | 2.36 | 3.94 | 8.91 | 14.39 | 1.05 | 7.7 | 12.9 | 29.1 | 46.9 | 3.4 | N. Y. State Ex. Sta. Rep., 1882, p. 24 | 522 |
| 523 | Do | 69.85 | 2.22 | 3.88 | 8.26 | 14.24 | 1.55 | 7.4 | 12.9 | 27.4 | 47.2 | 5.1 | ....do | 523 |

* In *loc cit.*, analysis and yield compared with that of clover. † Sown April 28, in drills. ‡ Sown three years before. § Sown May 17, in drills.
‖ Harvested same year as sown. ¶ Harvested same year as sown; did not bloom. ** Sown May 20 in drills.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GREEN FODDER—Continued. | | | | | | | | | | | | | |
| | LEGUMES—continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 524 | Soja bean (*Soja hispida*) | 70.41 | 2.58 | 2.20 | 7.93 | 16.01 | 0.87 | 8.7 | 7.4 | 26.8 | 54.2 | 2.9 | N. Y. State Ex. Sta. Rep., 1883, p. 150 | 524 |
| 525 | 2½ feet high *a* | 81.16 | 2.38 | 2.88 | 7.08 | 5.78 | 0.72 | 12.4 | 15.3 | 37.7 | 30.8 | 3.8 | Md. Ex. Sta. Rep., 1888, p. 68 | 525 |
| 526 | 3 feet high *a* | 80.99 | 2.20 | 2.26 | 5.86 | 7.97 | 0.72 | 11.6 | 11.9 | 30.8 | 41.9 | 3.8 | ....do | 526 |
| 527 | 3 feet high; grown on poorer soil than last *a* | 77.37 | 2.51 | 2.78 | 5.59 | 10.82 | 0.93 | 11.1 | 12.3 | 24.7 | 47.8 | 4.1 | ....do | 527 |
| 528 | Frosted *a* | 62.29 | 2.60 | 4.60 | 12.52 | 16.78 | 1.21 | 6.9 | 12.2 | 33.2 | 44.5 | 3.2 | ....do | 528 |
| | All analyses, excluding No. 528: Maximum | 81.16 | 2.58 | 3.94 | 8.91 | 16.01 | 1.55 | 12.4 | 15.3 | 37.7 | 54.2 | 5.1 | | |
| | All analyses, excluding No. 528: Minimum | 69.35 | 2.20 | 2.20 | 5.59 | 5.78 | 0.72 | 6.9 | 7.4 | 24.7 | 30.8 | 2.9 | | |
| | All analyses, excluding No. 528: Average | **74.85** | **2.38** | **2.99** | **7.27** | **11.54** | **0.97** | **9.5** | **12.0** | **29.0** | **45.7** | **3.8** | | |
| | OTHER FORAGE PLANTS. | | | | | | | | | | | | | |
| 529 | Prickly comfrey (*Symphytum officinale*) | 86.14 | 2.56 | 3.25 | 2.00 | 5.68 | 0.37 | 18.5 | 23.4 | 14.4 | 41.0 | 2.7 | N. Y. State Ex. Sta. Rep., 1884, p. 330 | 529 |
| 530 | Beginning to bloom *a d e* | 88.24 | 1.64 | 1.88 | 2.66 | 5.27 | 0.31 | 13.9 | 16.0 | 22.7 | 44.7 | 2.7 | N. Y. State Ex. Sta. Rep., 1887, p. 422 | 530 |
| 531 | Stage of growth unknown | 78.70 | 3.16 | 3.69 | 3.19 | 10.42 | 0.84 | 14.8 | 17.3 | 15.0 | 48.9 | 4.0 | ....do | 531 |
| 532 | Planted in rows 4 feet apart, 3 feet between the hills; cut in August. | 88.69 | 2.97 | 2.32 | 1.32 | 4.49 | 0.21 | 26.3 | 20.5 | 11.7 | 39.7 | 1.8 | Wis. Ex. Sta. Rep., 1888, p. 139 | 532 |
| 533 | In bloom; much adhering dirt; cut after a rain. *a h i j* | 95.63 | 1.04 | 1.21 | 0.41 | 1.56 | 0.15 | 23.9 | 27.7 | 9.5 | 35.5 | 3.4 | S. C. Ex. Sta. Rep., 1888, p. 133 | 533 |
| 534 | Cut Sept. 15; young growth; cut previously Aug. 10. | 86.62 | 3.60 | 3.35 | 1.27 | 4.81 | 0.35 | 26.9 | 25.0 | 9.5 | 40.0 | 2.6 | Vt. Ex. Sta. Rep., 1888, p. 74 | 534 |
| 535 | Cut Sept. 17; first cutting since plants were set out. | 85.53 | 3.27 | 3.61 | 1.44 | 5.72 | 0.43 | 22.9 | 24.9 | 9.9 | 39.3 | 3.0 | ....do | 535 |
| 536 | First cutting *h i j** | 90.81 | 1.55 | 2.43 | 1.15 | 3.75 | 0.26 | 16.9 | 27.0 | 12.5 | 40.8 | 2.8 | Pa. Ex. Sta. Bul. 6, 1888, p. 15 | 536 |
| 537 | Second cutting *h i j** | 90.38 | 1.62 | 2.68 | 1.23 | 3.84 | 0.25 | 16.8 | 27.9 | 12.8 | 39.9 | 2.6 | ....do | 537 |
| 538 | Third cutting *h i j** | 88.64 | 1.80 | 1.96 | 1.28 | 6.05 | 0.27 | 15.8 | 17.3 | 11.3 | 53.2 | 2.4 | ....do | 538 |
| 539 | First crop, cut in bloom *a h i j* | 91.70 | 1.25 | 1.78 | 1.11 | 3.95 | 0.21 | 15.0 | 21.5 | 13.4 | 47.6 | 2.5 | Wis. Ex. Sta. Rep., 1889, p. 207 | 539 |
| 540 | Second crop, cut when seed stalks appeared. *a h i j* | 88.67 | 2.12 | 1.67 | 2.48 | 4.89 | 0.17 | 18.7 | 14.8 | 21.9 | 43.2 | 1.4 | ....do | 540 |
| 541 | Third crop, cut when seed stalks appeared. *a h i j* | 91.73 | 1.36 | 1.11 | 1.18 | 4.31 | 0.31 | 16.5 | 13.4 | 14.3 | 52.1 | 3.7 | ....do | 541 |
| 542 | Fourth crop, cut when seed stalks appeared. *a h i j* | 85.62 | 2.72 | 2.40 | 1.49 | 7.41 | 0.36 | 18.9 | 16.7 | 10.4 | 51.5 | 2.5 | ....do | 542 |
| | Russian spurry (*Spergula maxima*): | | | | | | | | | | | | | |
| 543 | Cut July 24, in seed; sown same year *a h i j* | 75.70 | 4.01 | 1.96 | 4.89 | 12.65 | 0.79 | 16.5 | 8.1 | 20.1 | 52.0 | 3.3 | Pa. Ex. Sta. Rep., 1887, p. 141 | 543 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 544 | Cut Aug. 2, in seed; sown same year *a h i j* | 58.68 | 5.02 | 4.59 | 6.79 | 22.79 | 2.13 | 12.1 | 11.1 | 16.4 | 55.2 | 5.2 | do | 544 |
| 545 | White mustard (*Sinapis alba*), sown May 3 in rows 1 foot apart; cut June 14; in full bloom. *h i j* | 84.19 | 4.08† | 4.34 | 2.04 | 4.84 | 0.51 | 25.7 | 27.3 | 12.9 | 30.9 | 3.2 | Pa. Ex. Sta. Bul. 6, 1889 | 545 |
| 546 | Japanese buckwheat, cut Oct. 4, after two hard frosts. | 63.37 | 3.60 | 4.64 | 7.96 | 19.55 | 0.88 | 9.8 | 12.6 | 21.7 | 53.5 | 2.4 | Vt. Ex. Sta. Rep., 1888, p. 74 | 546 |
| 547 | Dandelion (*Taraxicum officinale*) | 85.54 | 1.99 | 2.81 | 1.52 | 7.45 | 0.69 | 13.8 | 19.4 | 10.5 | 51.5 | 4.8 | Bussey Inst. Bul., 1877, p. 117 | 547 |
| 548 | Nettle (*Urtica dioica*) | 82.44 | 2.30 | 5.50 | 1.96 | 7.13 | 0.67 | 13.1 | 31.4 | 11.2 | 40.5 | 3.8 | Bussey Inst. Bul., 1877, p. 119 | 548 |
| 549 | Plantain (*Plantago major*) | 81.44 | 2.16 | 2.65 | 2.09 | 11.19 | 0.47 | 11.7 | 14.3 | 11.3 | 60.2 | 2.5 | Bussey Inst. Bul., 1877, p. 123 | 549 |
| 550 | Purslane (*Portulaca oleracea*) | 92.61 | 1.56 | 2.24 | 1.03 | 2.16 | 0.40 | 21.1 | 30.2 | 13.9 | 29.4 | 5.4 | Bussey Inst. Bul., 1877, p. 126 | 550 |
| 551 | Pigweed (*Chenopodium album*) | 80.80 | 3.02 | 3.94 | 2.55 | 8.93 | 0.76 | 15.7 | 20.5 | 13.3 | 46.5 | 4.0 | Bussey Inst. Bul., 1877, p. 127 | 551 |
| | Horsetail, scouring rush (*Equisetum arvense*): | | | | | | | | | | | | | |
| 552 | Fertile stems | 87.28 | 1.60 | 1.86 | 1.87 | 7.05 | 0.34 | 12.7 | 14.8 | 14.8 | 55.0 | 2.7 | Bussey Inst. Bul., 1878, p. 167 | 552 |
| 553 | Sterile stems | 85.63 | 1.74 | 3.34 | 2.49 | 6.04 | 0.76 | 12.2 | 23.3 | 17.2 | 42.0 | 5.3 | do | 553 |
| 554 | Spanish moss (*Tillandsia usneoides*) | 60.80 | 1.05 | 1.75 | 12.78 | 22.62 | 1.00 | 2.7 | 4.4 | 32.6 | 57.7 | 2.6 | Mass. State Ex. Sta. Rep., 1889, p. 145 | 554 |
| | LEAVES AND TOPS. | | | | | | | | | | | | | |
| | Beet tops: | | | | | | | | | | | | | |
| 555 | Dewing Blood Turnip; entire plant; collected June 2; height, 9.9 inches. *a* | 90.12 | 2.85 | 2.32 | 0.71 | 3.46 | 0.54 | 28.8 | 23.5 | 7.2 | 35.0 | 5.5 | U. S. Dept. Agr. Rep., 1883, p. 237 | 555 |
| | Dewing Blood Turnip, tops; collected— | | | | | | | | | | | | | |
| 556 | June 9; height 3.5 inches; weight of one, 0.03 pound; for analysis of root, see No. 1470 *a* | 90.04 | 2.63 | 2.55 | 0.83 | 3.32 | 0.63 | 26.4 | 25.6 | 8.4 | 33.3 | 6.3 | do | 556 |
| 557 | June 19; height, 14.2 inches; weight of one, 0.07 pound; for analysis of root, see No. 1471. *a* | 91.91 | 1.97 | 1.74 | 0.61 | 3.34 | 0.43 | 24.4 | 21.5 | 7.5 | 41.3 | 5.3 | do | 557 |
| 558 | June 26; height, 10.6 inches; weight of one, 0.11 pound; for analysis of root, see No. 1472. *a* | 89.57 | 2.76 | 2.00 | 0.89 | 4.21 | 0.57 | 26.5 | 19.1 | 8.6 | 40.3 | 5.5 | do | 558 |
| 559 | July 3; height, 13 inches; weight of one, 0.32 pound; for analysis of root, see No. 1473. *a* | 92.63 | 1.88 | 1.26 | 0.56 | 3.34 | 0.33 | 25.5 | 17.0 | 7.8 | 45.3 | 4.4 | do | 559 |
| 560 | July 10; height, 13.8 inches; weight of one, 0.25 pound; for analysis of root, see No. 1474. *a* | 85.51 | 3.43 | 2.95 | 1.19 | 6.27 | 0.65 | 23.7 | 20.3 | 8.2 | 43.3 | 4.5 | do | 560 |
| 561 | July 24; height, 11.8 inches; weight of one, 0.23 pound; for analysis of root, see No. 1475. *a* | 81.93 | 4.54 | 3.26 | 1.41 | 7.98 | 0.88 | 25.1 | 18.0 | 7.7 | 44.3 | 4.9 | do | 561 |
| 562 | Aug. 15; height, 10.2 inches; weight of one, 0.12 pound; for analysis of root, see No. 1476. *a* | 87.83 | 2.86 | 2.44 | 1.00 | 5.20 | 0.67 | 23.5 | 20.1 | 8.2 | 42.7 | 5.5 | do | 562 |
| 563 | Oct. 25; weight of one, 0.06 pound; for analysis of root, see No. 1477. *a* | 81.97 | 3.81 | 3.87 | 1.52 | 8.07 | 0.76 | 21.1 | 21.4 | 8.4 | 44.3 | 4.8 | do | 563 |
| | Carrot tops: | | | | | | | | | | | | | |
| 564 | Early Long Orange, entire plant, collected June 2; height, 10.2 inches. *a* | 85.10 | 3.57 | 3.45 | 0.96 | 6.23 | 0.69 | 23.9 | 23 1 | 6.5 | 41.9 | 4.6 | U. S. Dept. Agr. Rep., 1883, p. 239 | 564 |
| | Early Long Orange, tops; collected— | | | | | | | | | | | | | |
| 565 | June 9; for analysis of root, see No. 1522. *a* | 85.70 | 2.96 | 3.38 | 1.16 | 6.42 | 0.38 | 20.7 | 23.7 | 8.1 | 44.9 | 2.6 | do | 565 |

*Roots set out in rows 3 feet apart and from 1 to 1½ feet in the row.

†Including sand, 1.83.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GREEN FODDER—Continued. | | | | | | | | | | | | | |
| | LEAVES AND TOPS—continued. | | | | | | | | | | | | | |
| | Carrot tops—Continued. | | | | | | | | | | | | | |
| | Early Long Orange, tops; collected— | % | % | % | % | % | % | % | % | % | % | % | | |
| 566 | June 19; height, 10.6 inches; average weight of one, 0.01 pound; for analysis of root, see No 1523. *a* | 82.10 | 3.23 | 3.82 | 1.36 | 8.73 | 0.76 | 18.1 | 21.3 | 7.6 | 48.7 | 4.3 | U. S. Dept. Agr. Rep., 1883, p. 239 | 566 |
| 567 | June 26; height, 11 inches; average weight of one, 0.02 pound; for analysis of root, see No. 1524. *a* | 81.60 | 3.21 | 3.85 | 1.78 | 8.55 | 1.01 | 17.5 | 20.9 | 9.7 | 46.4 | 5.5 | do | 567 |
| 568 | July 3; height, 11 inches; average weight of one, 0.10 pound; for analysis of root, see No. 1525. *a* | 81.70 | 2.96 | 3.46 | 1.56 | 9.41 | 0.91 | 16.2 | 18.9 | 8.5 | 51.4 | 5.0 | do | 568 |
| 569 | July 10; height, 14 inches; average weight of one, 0.11 pound; for analysis of root, see No. 1526. *a* | 83.40 | 3.00 | 3.04 | 1.35 | 8.43 | 0.73 | 18.1 | 18.3 | 8.2 | 51.0 | 4.4 | do | 569 |
| 570 | July 20; height, 15 inches; average weight of one, 0.14 pound; for analysis of root, see No. 1527. *a* | 81.80 | 3.09 | 3.38 | 1.52 | 9.44 | 0.77 | 16.9 | 18.6 | 8.4 | 51.9 | 4.2 | do | 570 |
| 571 | Oct. 15; height, 16 inches; average weight of one, 0.26 pound; for analysis of root, see No. 1528. *a** | 82.40 | 3.20 | 2.83 | 1.60 | 10.03 | 0.94 | 17.2 | 15.2 | 8.6 | 53.9 | 5.1 | do | 571 |
| 572 | Oct. 26; height, 14.2 inches; average weight of one, 0.57 pound; for analysis of root, see No. 1529. *a* | 85.40 | 2.47 | 2.39 | 1.68 | 7.38 | 0.68 | 16.9 | 16.4 | 11.5 | 50.5 | 4.7 | do | 572 |
| 573 | Danvers, tops | 76.79 | 3.23 | 4.66 | 3.16 | 11.70 | 0.46 | 13.9 | 20.1 | 13.6 | 50.4 | 2.0 | Mass. State Ex. Sta. Rep., 1889, p. 182 | 573 |
| | Onion tops: | | | | | | | | | | | | | |
| | Giant Della Rocca, entire plant; collected— | | | | | | | | | | | | | |
| 574 | June 2; height, 5.5 inches *a* | 89.79 | 2.22 | 2.27 | 1.04 | 4.05 | 0.63 | 21.8 | 22.2 | 10.2 | 39.7 | 6.1 | U. S. Dept. Agr. Rep., 1883, p. 240 | 574 |
| 575 | June 15; height, 13.8 inches *a* | 90.71 | 0.94 | 1.87 | 1.14 | 4.67 | 0.67 | 10.2 | 20.2 | 12.2 | 50.2 | 7.2 | do | 575 |
| 576 | June 23; height, 13.8 inches *a* | 91.13 | 1.41 | 1.72 | 1.40 | 3.64 | 0.70 | 15.9 | 19.3 | 15.8 | 41.1 | 7.9 | do | 576 |
| | Giant Della Rocca, tops; collected— | | | | | | | | | | | | | |
| 577 | June 29; height, 14.2 inches; for analysis of bulb, see No. 1537. *a* | 91.48 | 1.28 | 1.80 | 1.60 | 3.26 | 0.58 | 15.0 | 21.2 | 18.8 | 38.2 | 6.8 | do | 577 |
| 578 | July 10; height, 11.4 inches; for analysis of bulb, see No. 1538. *a* | 91.18 | 1.34 | 1.78 | 0.97 | 4.23 | 0.50 | 15.1 | 20.2 | 11.0 | 48.0 | 5.7 | do | 578 |
| 579 | July 20; height, 11.8 inches; for analysis of bulb, see No. 1539. *a* | 90.30 | 1.64 | 1.80 | 1.24 | 4.81 | 0.21 | 16.8 | 18.6 | 12.8 | 49.6 | 2.2 | do | 579 |
| | Average of Nos. 577 to 579 | **90.99** | **1.42** | **1.79** | **1.27** | **4.10** | **0.43** | **15.8** | **19.9** | **14.1** | **45.4** | **4.8** | | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Spruce needles (*Abies excelsa*), collected— | | | | | | | | | | | | | |
| 580 | June 1 *a* | 80.60 | 1.05 | 2.41 | 3.29 | 9.67 | 2.98 | 3.4 | 12.4 | 17.0 | 49.8 | 15.4 | U. S. Dept. Agr. Rep., 1883, p. 241 | 580 |
| 581 | June 6 *a* | 77.00 | 0.96 | 2.38 | 4.82 | 12.05 | 2.79 | 4.2 | 10.4 | 29.0 | 52.3 | 12.1 | ....do | 581 |
| 582 | June 16 *a* | 75.40 | 0.99 | 2.07 | 7.88 | 11.06 | 2.60 | 4.0 | 8.4 | 32.1 | 44.9 | 10.6 | ....do | 582 |
| 583 | June 23 *a* | 71.60 | 1.24 | 2.52 | 7.77 | 13.68 | 3.19 | 4.4 | 8.9 | 27.4 | 48.1 | 11.2 | ....do | 583 |
| 584 | July 6 *a* | 67.20 | 0.94 | 3.00 | 8.90 | 16.08 | 3.88 | 2.8 | 9.2 | 22.1 | 49.1 | 11.8 | ....do | 584 |
| 585 | July 15 *a* | 64.30 | 1.63 | 2.76 | 8.89 | 19.08 | 3.34 | 4.5 | 7.7 | 24.9 | 53.5 | 9.4 | ....do | 585 |
| 586 | Aug. 16 *a* | 68.70 | 1.57 | 2.42 | 8.57 | 15.64 | 3.20 | 5.0 | 7.5 | 27.4 | 49.9 | 10.2 | ....do | 586 |
| 587 | Oct. 20 *a* | 56.70 | 2.32 | 4.19 | 10.38 | 21.94 | 4.47 | 5.4 | 9.7 | 23.9 | 50.7 | 10.3 | ....do | 587 |
| | Maple leaves (*Acer dasycarpum*), collected— | | | | | | | | | | | | | |
| 588 | June 16 *a* | 67.50 | 1.86 | 5.58 | 4.34 | 14.82 | 5.90 | 5.7 | 17.1 | 13.4 | 45.6 | 18.2 | U. S. Dept. Agr. Rep., 1883, p. 242 | 588 |
| 589 | June 23 *a* | 68.10 | 2.17 | 5.70 | 3.12 | 15.34 | 5.57 | 6.8 | 17.9 | 9.8 | 48.0 | 17.5 | ....do | 589 |
| 590 | July 6 *a* † | 62.30 | 2.24 | 6.09 | 3.17 | 19.79 | 5.11 | 6.0 | 16.1 | 8.4 | 52.4 | 17.1 | ....do | 590 |
| 591 | July 15 *a* | 73.50 | 1.68 | 4.45 | 1.95 | 15.00 | 3.37 | 6.4 | 17.0 | 7.3 | 56.6 | 12.7 | ....do | 591 |
| 592 | Aug. 16 *a* | 75.70 | 2.05 | 3.47 | 2.53 | 13.29 | 2.96 | 8.5 | 14.2 | 10.4 | 54.7 | 12.2 | ....do | 592 |
| 593 | Oct. 20 *a* | 69.40 | 2.58 | 3.20 | 3.31 | 15.14 | 6.37 | 8.4 | 10.5 | 10.8 | 49.5 | 20.8 | ....do | 593 |
| | SILAGE. | | | | | | | | | | | | | |
| | Corn (maize) silage: | | | | | | | | | | | | | |
| 594 | Particulars unknown | 80.70 | 1.77 | 1.56 | 6.43 | 8.92 | 0.62 | 9.2 | 8.1 | 33.3 | 46.2 | 3.2 | Agr. of Mass., 1880, p. 166 | 594 |
| 595 | Do | 77.40 | 1.00 | 1.02 | 6.85 | 13.05 | 0.68 | 4.4 | 4.5 | 30.3 | 57.8 | 3.0 | N. J. Ex. Sta. Rep., 1881, p. 55 | 595 |
| 596 | Do | 78.51 | 1.53 | 0.88 | 6.43 | 12.03 | 0.62 | 7.1 | 4.1 | 29.9 | 56.0 | 2.9 | ....do | 596 |
| 597 | Do | 80.86 | 1.00 | 1.27 | 5.47 | 10.73 | 0.67 | 5.2 | 6.6 | 28.6 | 56.1 | 3.5 | ....do | 597 |
| 598 | Do | 82.10 | 1.02 | 1.21 | 5.34 | 9.62 | 0.71 | 5.7 | 7.2 | 29.8 | 53.8 | 3.5 | ....do | 598 |
| 599 | Do | 83.42 | 1.53 | 0.98 | 5.17 | 8.05 | 0.85 | 9.2 | 5.9 | 27.2 | 52.6 | 5.1 | ....do | 599 |
| 600 | Do | 83.56 | 0.84 | 0.88 | 5.76 | 8.23 | 0.73 | 5.1 | 5.4 | 35.1 | 50.0 | 4.4 | ....do | 600 |
| 601 | Do | 83.54 | 1.40 | 1.06 | 5.85 | 7.65 | 0.50 | 8.5 | 6.4 | 35.4 | 46.7 | 3.0 | ....do | 601 |
| 602 | Do | 84.28 | 1.26 | 1.37 | 4.68 | 7.91 | 0.50 | 8.0 | 8.7 | 29.8 | 50.3 | 3.2 | ....do | 602 |
| 603 | Do | 84.87 | 0.98 | 1.06 | 5.61 | 7.03 | 0.45 | 6.5 | 7.0 | 37.1 | 46.4 | 3.0 | ....do | 603 |
| 604 | Do | 74.15 | 1.82 | 1.94 | 7.86 | 13.36 | 0.87 | 7.0 | 7.4 | 30.5 | 51.7 | 3.4 | ....do | 604 |
| 605 | Do | 79.51 | 0.95 | 1.50 | 6.54 | 10.87 | 0.63 | 4.6 | 7.3 | 31.9 | 53.1 | 3.1 | ....do | 605 |
| 606 | Do | 80.04 | 1.18 | 1.63 | 6.31 | 10.28 | 0.56 | 5.9 | 8.2 | 31.6 | 51.5 | 2.8 | ....do | 606 |
| 607 | Do | 81.95 | 1.63 | 1.78 | 5.11 | 8.90 | 0.63 | 9.0 | 9.9 | 28.4 | 49.2 | 3.5 | ....do | 607 |
| 608 | Do | 83.81 | 1.08 | 1.63 | 4.99 | 7.74 | 0.75 | 6.7 | 10.0 | 30.8 | 47.9 | 4.6 | ....do | 608 |
| 609 | Do | 83.52 | 1.43 | 0.94 | 5.18 | 8.28 | 0.65 | 8.7 | 5.7 | 32.0 | 49.7 | 3.9 | ....do | 609 |
| 610 | Do | 82.09 | 1.04 | 1.27 | 5.76 | 9.50 | 0.34 | 5.8 | 7.1 | 32.1 | 53.1 | 1.9 | Conn. State Ex. Sta. Rep., 1881, p. 89 | 610 |
| 611 | Do | 74.10 | 1.48 | 2.77 | 7.04 | 12.87 | 1.74 | 5.8 | 10.7 | 27.2 | 49.6 | 6.7 | U. S. Dept. Agr., 1881–'82, p. 572 | 611 |
| 612 | Do | 77.30 | 2.01 | 1.94 | 5.71 | 11.24 | 1.80 | 8.9 | 8.5 | 25.2 | 49.5 | 7.9 | ....do | 612 |
| 613 | Do | 72.12 | 2.19 | 1.95 | 10.02 | 12.95 | 0.77 | 7.8 | 7.0 | 35.9 | 46.5 | 2.8 | N. Y. Cornell Ex. Sta. Rep., 1882–'83, p. 41 | 613 |
| 614 | Silage of No. 52, planted in hills as usual for crop of grain. | 82.38 | 1.05 | 1.39 | 4.80 | 9.96 | 0.42 | 6.0 | 7.9 | 27.2 | 56.6 | 2.3 | Conn. State Ex. Sta. Rep., 1882, p. 100 | 614 |
| 615 | Silage of No. 53, planted in drills thickly | 87.68 | 0.91 | 1.38 | 4.04 | 5.62 | 0.37 | 7.4 | 11.3 | 32.8 | 45.5 | 3.0 | ....do | 615 |
| 616 | Particulars unknown | 77.65 | 1.78 | 2.01 | 6.02 | 11.99 | 0.55 | 8.0 | 9.0 | 27.0 | 53.6 | 2.4 | Conn. State Ex. Sta. Rep., 1882, p. 102 | 616 |
| 617 | Do | 74.70 | 1.95 | 1.75 | 7.86 | 13.47 | 0.27 | 7.7 | 6.9 | 31.1 | 53.2 | 1.1 | N. J. Ex. Sta. Rep., 1882, p. 80 | 617 |
| 618 | Silage of No. 32 | 78.67 | 1.66 | 1.23 | 5.27 | 12.02 | 1.13 | 7.8 | 5.8 | 24.7 | 56.4 | 5.3 | Rep. of Expts. at Univ. Wis., 1882, p. 65 | 618 |
| 619 | Do | 76.12 | 1.65 | 0.90 | 6.24 | 14.23 | 0.87 | 6.9 | 3.8 | 26.1 | 59.5 | 3.7 | ....do | 619 |
| 620 | Silage of No. 54 ‡ | 75.10 | 1.58 | 1.81 | 6.23 | 13.98 | 0.31 | 6.3 | 7.4 | 25.0 | 56.1 | 1.2 | N. J. Ex. Sta. Rep., 1883, p. 75 | 620 |
| 621 | Do § | 77.83 | 1.43 | 1.61 | 5.71 | 12.27 | 0.26 | 6.4 | 7.3 | 25.8 | 55.1 | 1.2 | ....do | 621 |
| 622 | Do. *b* | 72.48 | 1.47 | 1.86 | 7.16 | 16.49 | 0.54 | 5.3 | 6.8 | 26.0 | 59.9 | 2.0 | N. J. Ex. Sta. Rep., 1884, p. 106 | 622 |

* Adds 101 (fresh or air-dry material).
† Adds 98.70 (fresh or air-dry material).
‡ Adds 99.04 (fresh or air-dry material).
§ Adds 99.11 (fresh or air-dry material).

| | | In fresh or air dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | SILAGE—Continued. | | | | | | | | | | | | | |
| | Corn (maize) silage—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 623 | Particulars unknown | 72.92 | 1.69 | 1.76 | 7.28 | 15.65 | 0.71 | 6.2 | 6.5 | 27.0 | 57.7 | 2.6 | N. J. Ex. Sta. Rep., 1884, p. 106 | 623 |
| 624 | Do. *b* | 87.16 | 1.64 | 1.81 | 4.00 | 5.12 | 0.27 | 12.8 | 14.1 | 31.1 | 39.9 | 2.1 | do | 624 |
| 625 | Do. *b* | 83.18 | 1.27 | 1.77 | 5.21 | 8.20 | 0.37 | 7.5 | 10.6 | 31.0 | 48.7 | 2.2 | do | 625 |
| 626 | Do. *b* | 81.02 | 1.33 | 1.71 | 5.45 | 10.17 | 0.32 | 7.0 | 9.0 | 28.8 | 53.5 | 1.7 | do | 626 |
| 627 | Do. *b* | 75.77 | 1.41 | 1.74 | 6.47 | 14.34 | 0.27 | 5.8 | 7.2 | 26.7 | 59.2 | 1.1 | do | 627 |
| 628 | Do. *b* | 70.76 | 1.49 | 1.71 | 7.34 | 18.40 | 0.30 | 5.1 | 5.8 | 25.1 | 63.0 | 1.0 | N. J. Ex. Sta. Rep., 1884, p. 107 | 628 |
| 629 | Do. *b* | 71.86 | 1.24 | 1.72 | 7.35 | 17.51 | 0.32 | 4.4 | 6.1 | 26.2 | 62.2 | 1.1 | do | 629 |
| 630 | Do. *b* | 81.62 | 1.59 | 1.52 | 5.58 | 9.45 | 0.24 | 8.6 | 8.3 | 30.4 | 51.4 | 1.3 | do | 630 |
| 631 | Do. *b* | 82.05 | 1.44 | 1.52 | 4.93 | 9.83 | 0.23 | 8.0 | 8.5 | 27.4 | 54.8 | 1.3 | do | 631 |
| 632 | From frosted maize | 85.42 | 2.94* | 1.75 | 4.17 | 5.40 | 0.32 | 20.2 | 12.0 | 28.6 | 37.0 | 2.2 | Conn. State Ex. Sta. Rep., 1884, p. 110 | 632 |
| 633 | From maize that suffered from drouth | 83.04 | 1.22 | 0.95 | 6.09 | 8.06 | 0.64 | 7.2 | 5.6 | 35.9 | 47.5 | 3.8 | do | 633 |
| 634 | Particulars unknown | 78.61 | 1.50 | 1.60 | 7.10 | 10.22 | 0.97 | 7.0 | 7.5 | 33.2 | 47.8 | 4.5 | N. Y. State Ex. Sta. Rep., 1884, p. 47 | 634 |
| 635 | Do | 82.35 | 1.05 | 0.87 | 5.87 | 8.72 | 1.14 | 6.0 | 4.9 | 33.3 | 49.4 | 6.4 | do | 635 |
| 636 | Do | 84.58 | 0.91 | 1.13 | 5.01 | 7.22 | 1.15 | 5.9 | 7.3 | 32.5 | 46.9 | 7.4 | do | 636 |
| 637 | From corn in tassel | 86.88 | 0.91 | 1.65 | 4.42 | 5.63 | 0.52 | 6.9 | 12.5 | 33.7 | 43.0 | 3.9 | Mass. State Ex. Sta. Bul. 10, 1884 | 637 |
| 638 | Particulars unknown | 87.68 | 0.91 | 1.38 | 4.04 | 5.62 | 0.37 | 7.4 | 11.2 | 32.8 | 45.6 | 3.0 | Ala. Ex. Sta. Bul. 3, 1884 | 638 |
| 639 | From Clark variety; cut before putting into silo in pieces 1½ to 1½ inches long. | 81.88 | 0.92 | 1.42 | 4.75 | 10.40 | 0.63 | 5.1 | 7.8 | 26.2 | 57.4 | 3.5 | Mass. State Ex. Sta. Rep., 1885, p. 19 | 639 |
| 640 | Same crop as No. 639, but put into silo without cutting. | 83.18 | 0.71 | 1.51 | 4.96 | 9.02 | 0.62 | 4.2 | 9.0 | 29.4 | 53.7 | 3.7 | Mass. State Ex. Sta. Rep., 1885, p. 20 | 640 |
| 641 | Particulars unknown | 81.49 | 1.25 | 1.02 | 5.74 | 10.17 | 0.33 | 6.7 | 5.5 | 31.0 | 55.0 | 1.8 | Wis. Ex. Sta. Rep., 1886, p. 96 | 641 |
| 642 | In first silk | 83.17 | 1.31 | 2.06 | 5.11 | 7.07 | 1.28 | 7.8 | 12.3 | 30.4 | 41.9 | 7.6 | Ky. Ex. Sta. Bul. 5, 1886 | 642 |
| 643 | Particulars unknown | 82.78 | 1.34 | 1.57 | 5.22 | 8.36 | 0.73 | 7.8 | 9.1 | 30.3 | 48.5 | 4.3 | do | 643 |
| 644 | Do | 86.98 | 0.67 | 0.72 | 5.11 | 5.90 | 0.62 | 5.1 | 5.5 | 39.3 | 45.4 | 4.7 | N. Y. State Ex. Sta. Rep., 1886, p. 365 | 644 |
| 645 | Do | 86.07 | 0.68 | 0.77 | 2.98 | 8.98 | 0.52 | 4.9 | 5.5 | 21.3 | 64.6 | 3.7 | do | 645 |
| 646 | Do | 86.25 | 0.94 | 0.93 | 4.79 | 6.42 | 0.67 | 6.9 | 6.8 | 34.8 | 46.6 | 4.9 | do | 646 |
| 647 | Silo filled at intervals during 8 days without exclusion of air, then covered. | 78.05 | 0.69 | 1.62 | 4.50 | 14.30 | 0.84 | 3.2 | 7.4 | 20.5 | 65.1 | 3.8 | Mass. State Ex. Sta. Rep., 1886, p. 63 | 647 |
| 648 | Same maize as No. 647, but filled and covered at once. | 76.90 | 1.21 | 1.91 | 4.08 | 15.17 | 0.73 | 5.2 | 8.3 | 17.7 | 65.7 | 3.1 | do | 648 |
| 649 | Silage of No. 19, Clark variety *c* | 71.60 | 0.95 | 2.21 | 5.26 | 18.26 | 1.72 | 3.3 | 7.8 | 18.5 | 64.3 | 6.1 | Mass. State Ex. Sta. Rep., 1887, p. 93 | 649 |
| 650 | From field-cured stover; put into silo before frosts; allowed to heat 4 days before weighting. | 80.06 | 1.49 | 1.50 | 6.10 | 9.87 | 0.98 | 7.5 | 7.6 | 30.5 | 49.5 | 4.9 | Vt. Ex. Sta. Rep., 1887, p. 125 | 650 |
| 651 | Same as No. 650, except was weighted as soon as filled. | 80.07 | 1.28 | 1.40 | 5.65 | 10.65 | 0.95 | 6.4 | 7.0 | 28.4 | 53.4 | 4.8 | do | 651 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 652 | Variety unknown | 64.42 | 1.74 | 2.82 | 7.18 | 22.24 | 1.58 | 4.9 | 7.9 | 20.2 | 62.5 | 4.5 | Ill. Ex. Sta. Bul. 2, 1888, p. 21 | 652 |
| 653 | Do. *a* | 74.94 | 2.61 | 2.04 | 7.51 | 12.26 | 0.64 | 10.4 | 8.1 | 30.0 | 48.9 | 2.5 | La. Ex. Sta. Bul. 17, 1888, p. 131 | 653 |
| 654 | Stowell Evergreen corn, cut and put into silo when kernels were just past the milk. | 78.88 | 1.33 | 1.89 | 5.44 | 11.77 | 0.69 | 6.3 | 8.9 | 25.8 | 55.7 | 3.3 | Mass. State Ex. Sta. Rep., 1888, p. 86 | 654 |
| 655 | Southern White, cut and put into silo when kernels were just past the milk. | 83.48 | 0.71 | 1.14 | 5.83 | 8.30 | 0.54 | 4.3 | 6.9 | 35.3 | 50.2 | 3.3 | ....do | 655 |
| 656 | Variety unknown | 77.24 | 1.12 | 2.20 | 4.70 | 14.02 | 0.72 | 4.9 | 9.7 | 20.7 | 61.5 | 3.2 | Mass. State Ex. Sta. Rep., 1888, p. 37 | 656 |
| 657 | Southern White, cut when tassels began to appear. | 79.19 | 2.01 | 1.58 | 7.61 | 8.83 | 0.78 | 9.6 | 7.6 | 36.6 | 42.4 | 3.8 | Reference unknown | 657 |
| 658 | Used in feeding experiments. *a* | 77.94 | 1.71 | 1.92 | 5.92 | 11.71 | 0.80 | 7.7 | 8.7 | 26.8 | 53.2 | 3.6 | Wis. Ex. Sta. Rep., 1888, p. 31 | 658 |
| 659 | Yellow dent, well preserved, sweet *a* † | 74.13 | 1.86 | 2.98 | 5.57 | 14.10 | 1.36 | 7.2 | 11.5 | 21.5 | 54.5 | 5.3 | Wis. Ex. Sta. Rep., 1888, p. 85 | 659 |
| 660 | Yellow dent, average of 6 samples taken Nov. 3 to Dec. 30; silage of No. 81; quality good in first sample, poor in last. *a* † | 70.62 | 2.59 | 2.70 | 9.68 | 13.69 | 0.72 | 8.8 | 9.2 | 32.9 | 46.7 | 2.4 | ....do | 660 |
| 661 | Yellow dent, dry silage; average of 4 samples taken Jan. 27 to Mar. 8; silage of No. 741; quality fair to good. *a* † | 30.76 | 4.38 | 6.18 | 21.48 | 35.84 | 1.36 | 6.3 | 8.9 | 31.0 | 51.8 | 2.0 | ....do | 661 |
| 662 | Wisconsin White Dent, quality very good *a* † | 78.45 | 1.84 | 1.86 | 5.83 | 11.02 | 1.00 | 8.5 | 8.6 | 27.0 | 51.3 | 4.6 | ....do | 662 |
| 663 | Wisconsin White Dent, sweet; ¾ maize, ¼ rye straw. *a* † | 80.55 | 1.41 | 2.11 | 7.24 | 7.46 | 1.23 | 7.2 | 10.8 | 37.2 | 38.4 | 6.4 | ....do | 663 |
| 664 | Large, sweet corn; average of 5 samples taken Nov. 16 to Jan. 12; silage of Nos. 129, 130; very fine, aromatic. *a* † | 77.94 | 2.02 | 1.90 | 5.87 | 11.48 | 0.79 | 9.2 | 8.6 | 26.6 | 52.0 | 3.6 | ....do | 664 |
| 665 | Large, sweet corn; average of 5 samples taken Feb. 7 to Mar. 5; silage of No. 131; quality good in first sample, poor in last. *a* † | 68.32 | 3.33 | 2.87 | 9.35 | 14.98 | 1.25 | 10.5 | 9.0 | 29.4 | 47.1 | 4.0 | ....do | 665 |
| 666 | Southern Sweet (Sheep-Tooth); put into silo Sept. 8, taken out Feb. 15; corn planted too thick for development of many ears; pleasant odor; relished by cattle. *a* † | 73.85 | 3.11 | 3.62 | 7.65 | 11.25 | 0.52 | 11.9 | 13.9 | 29.2 | 43.0 | 2.0 | ....do | 666 |
| 667 | Burrill & Whitman Southern Ensilage; average of 5 samples taken Jan. 14 to Feb. 15; silage of No. 82; quality very good. *a* † | 82.67 | 1.83 | 1.73 | 6.89 | 6.23 | 0.65 | 10.6 | 9.9 | 39.7 | 36.1 | 3.7 | ....do | 667 |
| 668 | Burrill & Whitman Southern Ensilage; put into silo Aug. 29 to Sept. 6 without cutting; average of 2 samples taken Mar. 12 and Apr. 2; silage of No. 82; quality very best. *a* † | 82.72 | 1.87 | 1.39 | 6.94 | 6.29 | 0.79 | 10.8 | 8.1 | 40.2 | 36.3 | 4.6 | ....do | 668 |
| 669 | Burrill & Whitman Southern Ensilage; put into silo Sept. 9 to 16 after cutting; taken out Feb. 15; kept perfectly, no waste. *a* † | 79.90 | 1.48 | 2.66 | 6.82 | 7.76 | 1.38 | 7.4 | 13.2 | 33.9 | 38.6 | 6.9 | ....do | 669 |
| 670 | Variety unknown | 80.50 | 1.26 | 1.62 | 3.63 | 12.45 | 0.54 | 6.5 | 8.3 | 18.7 | 63.7 | 2.8 | N. Y. State Ex. Sta. Rep., 1888, p. 237 | 670 |
| | Burrill & Whitman Southern Ensilage dent, wilted: | | | | | | | | | | | | | |
| 671 | Cut Aug. 25 *a*‡ | 81.00 | 1.29 | 1.91 | 5.84 | 9.06 | 0.90 | 6.8 | 10.1 | 30.7 | 47.7 | 4.7 | Mich. Ex. Sta. Bul. 49, 1889 | 671 |
| 672 | Cut Sept. 1 *a*‡ | 77.70 | 1.68 | 2.05 | 6.32 | 11.26 | 0.99 | 7.5 | 9.2 | 28.3 | 50.5 | 4.5 | ....do | 672 |
| 673 | Cut Sept. 8 *a*‡ | 78.68 | 1.27 | 1.58 | 6.33 | 11.32 | 0.82 | 6.0 | 7.4 | 29.7 | 53.1 | 3.8 | ....do | 673 |

* 2.00 sand and clay.

† In *loc. cit.*, lactic and acetic acid given.

‡ Plant in rows 3 feet 9 inches apart; stalks 10 inches apart.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | SILAGE—Continued. | | | | | | | | | | | | | |
| | Corn (maize) silage—Continued. | | | | | | | | | | | | | |
| | Burrill & Whitman Southern Ensilage dent, not wilted: | % | % | % | % | % | % | % | % | % | % | % | | |
| 674 | Cut Aug. 27 *a** | 84.00 | 1.05 | 1.50 | 5.17 | 7.56 | 0.72 | 6.6 | 9.4 | 32.3 | 47.2 | 4.5 | Mich. Ex. Sta. Bul. 49, 1889 | 674 |
| 675 | Cut Sept. 13 *a** | 80.28 | 1.07 | 1.32 | 5.83 | 10.72 | 0.78 | 5.4 | 7.1 | 29.5 | 54.4 | 3.6 | do | 675 |
| 676 | Whole corn *a* | 80.39 | 1.05 | 1.56 | 6.54 | 10.07 | 0.39 | 5.4 | 8.1 | 33.4 | 51.1 | 2.0 | Mo. Ex. Sta. Bul. 7, 1889 | 676 |
| 677 | Field corn *a* | 64.11 | 2.14 | 3.40 | 9.06 | 20.23 | 1.06 | 6.0 | 9.5 | 25.2 | 56.3 | 3.0 | do | 677 |
| 678 | Sweet corn *a* | 79.27 | 1.10 | 1.79 | 5.04 | 11.88 | 0.91 | 5.3 | 8.6 | 24.3 | 57.4 | 4.4 | do | 678 |
| 679 | Sweet corn | 74.56 | 0.27 | 2.07 | 5.11 | 16.34 | 1.65 | 1.1 | 8.1 | 20.1 | 64.2 | 6.5 | Mass. State Ex. Sta. Rep., 1889, p. 34 | 679 |
| 680 | Variety unknown | 80.77 | 0.98 | 1.97 | 6.53 | 9.23 | 0.52 | 5.1 | 10.3 | 34.0 | 48.0 | 2.6 | Mass. Ex. Sta. Rep., 1889, p. 143 | 680 |
| 681 | Do | 78.98 | 0.99 | 1.63 | 7.10 | 10.88 | 0.42 | 4.7 | 7.7 | 33.8 | 51.8 | 2.0 | do | 681 |
| 682 | Do | 79.73 | 0.65 | 1.52 | 5.76 | 11.61 | 0.73 | 3.2 | 7.5 | 28.4 | 57.3 | 3.6 | do | 682 |
| 683 | Silo rapidly filled *a* | 74.28 | 1.53 | 2.15 | 5.83 | 14.65 | 1.56 | 5.9 | 8.4 | 22.7 | 56.9 | 6.1 | Pa. Ex. Sta. Bul. 9, 1889 | 683 |
| 684 | Do. *a* | 72.28 | 1.48 | 2.35 | 7.13 | 15.25 | 1.51 | 5.3 | 8.5 | 25.7 | 55.1 | 5.4 | do | 684 |
| 685 | Silo slowly filled *a* | 67.44 | 1.43 | 2.45 | 8.95 | 17.76 | 1.99 | 4.4 | 7.5 | 27.5 | 54.5 | 6.1 | do | 685 |
| 686 | Do. *a* | 71.07 | 1.43 | 2.34 | 7.10 | 16.41 | 1.65 | 5.0 | 8.1 | 24.6 | 56.6 | 5.7 | do | 686 |
| 687 | Silo rapidly filled *a* | 72.47 | 1.44 | 2.26 | 7.30 | 15.41 | 1.12 | 5.3 | 8.2 | 26.6 | 55.8 | 4.1 | Wis. Ex. Sta. Rep., 1889, p. 73 | 687 |
| 688 | Do. *a* | 72.37 | 1.36 | 2.14 | 7.10 | 16.09 | 0.94 | 4.9 | 7.7 | 25.7 | 58.3 | 3.4 | do | 688 |
| 689 | Sibley Sheep-Tooth | 62.37 | 1.55 | 2.79 | 7.82 | 24.24 | 1.23 | 4.1 | 7.4 | 20.8 | 64.4 | 3.3 | Wis. Ex. Sta. Rep., 1889, p. 108 | 689 |
| 690 | Cross between Stowell Evergreen and 8-rowed variety. † | 76.38 | 1.50 | 2.01 | 4.73 | 14.08 | 1.30 | 6.2 | 8.5 | 20.0 | 59.7 | 5.6 | Mass. State Ex. Sta. Bul. 36, 1890 | 690 |
| 691 | Common field corn | 70.01 | 2.02 | 1.69 | 10.49 | 14.97 | 0.82 | 6.7 | 6.0 | 35.0 | 49.6 | 2.7 | do | 691 |
| 692 | Eureka Ensilage | 82.87 | 1.23 | 1.04 | 6.66 | 7.88 | 0.32 | 7.2 | 6.0 | 38.9 | 46.1 | 1.8 | do | 692 |
| 693 | Southern White | 75.36 | 1.53 | 1.60 | 7.44 | 13.44 | 0.63 | 6.3 | 6.5 | 30.2 | 54.4 | 2.6 | do | 693 |
| 694 | Do | 71.65 | 1.24 | 1.94 | 6.97 | 17.44 | 0.76 | 4.4 | 6.8 | 24.6 | 61.5 | 3.7 | do | 694 |
| 695 | Stowell Evergreen | 78.84 | 1.47 | 1.59 | 5.16 | 12.13 | 0.80 | 6.9 | 7.5 | 24.4 | 57.4 | 3.8 | do | 695 |
| | All analyses, excluding Nos. 632, 661, and 663. Maximum | 87.68 | 3.33 | 3.62 | 10.49 | 24.24 | 1.99 | 12.8 | 14.1 | 40.2 | 65.7 | 7.9 | | |
| | Minimum | 62.37 | 0.27 | 0.72 | 2.98 | 5.12 | 0.23 | 1.1 | 3.8 | 17.7 | 36.0 | 1.0 | | |
| | Average | **79.10** | **1.38** | **1.67** | **5.99** | **11.07** | **0.79** | **6.6** | **8.0** | **28.6** | **53.0** | **3.8** | | |
| | Silage of corn (maize), kernels:† | | | | | | | | | | | | | |
| 696 | Flint, 3½ months in silo; well preserved; made from wilted fodder; slow filling (see No. 1784). *a* | 39.85 | 0.57 | 4.58 | 1.09 | 50.62 | 3.89 | 0.9 | 7.6 | 1.8 | 83.2 | 6.5 | Wis. Ex. Sta. Rep., 1888, p. 78 | 696 |
| 697 | Flint, 4½ months in silo; well preserved; made from wilted fodder; slow filling (see No. 1784). *a* | 40.89 | 1.33 | 5.59 | 1.05 | 47.39 | 3.75 | 2.2 | 9.5 | 1.8 | 80.2 | 6.3 | do | 697 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 698 | Flint (King Philip), 3½ months in silo; very well preserved; made from fresh-cut fodder; rapid filling (see No. 1785). *a* | 41.20 | 1.26 | 5.64 | 0.93 | 47.32 | 3.65 | 2.1 | 9.6 | 1.6 | 80.5 | 6.2 | ....do.... | 698 |
| 699 | Flint, 4½ months in silo; good; made from cured fodder (see No. 1786). *a* | 21.09 | 1.65 | 10.13 | 3.65 | 59.08 | 4.40 | 2.1 | 12.8 | 4.6 | 74.9 | 5.6 | ....do.... | 699 |
| 700 | Dent (yellow), 4½ months in silo; ears much decayed; made from fresh-cut fodder; slow filling (see No. 1722). *a* | 47.74 | 0.99 | 5.17 | 1.54 | 41.74 | 2.82 | 1.9 | 9.9 | 2.9 | 79.9 | 5.4 | ....do.... | 700 |
| 701 | Dent, 4½ months in silo; ears much decayed (see No. 1723). *a* | 54.43 | 0.69 | 4.86 | 1.23 | 35.67 | 3.12 | 1.5 | 10.7 | 2.7 | 78.3 | 6.8 | ....do.... | 701 |
| 702 | Dent, 4½ months in silo; very well preserved; made from fresh-cut fodder; slow filling (see No. 1724). *a* | 38.13 | 0.91 | 7.53 | 1.69 | 48.08 | 3.66 | 1.5 | 12.1 | 2.7 | 77.6 | 5.9 | ....do.... | 702 |
| 703 | Dent, 4½ months in silo; very good; made from wilted fodder; slow filling (see No. 1725). *a* | 48.80 | 0.59 | 4.89 | 0.80 | 41.88 | 3.04 | 1.2 | 9.5 | 1.6 | 81.8 | 5.9 | ....do.... | 703 |
| 704 | Burrill & Whitman Southern Ensilage, 4 months in silo; very well preserved; made from fresh-cut fodder; slow filling (see No. 1726). *a* | 45.46 | 0.66 | 4.87 | 1.51 | 44.00 | 3.50 | 1.2 | 8.9 | 2.8 | 80.7 | 6.4 | ....do.... | 704 |
| | All analyses. Maximum | 54.43 | 1.65 | 10.13 | 3.65 | 59.08 | 4.40 | 2.2 | 12.8 | 4.6 | 83.2 | 6.8 | | |
| | All analyses. Minimum | 21.09 | 0.57 | 4.58 | 0.80 | 35.67 | 2.82 | 0.9 | 7.6 | 1.6 | 74.9 | 5.4 | | |
| | All analyses. Average | **41.33** | **0.99** | **5.97** | **1.52** | **46.62** | **3.57** | **1.7** | **10.2** | **2.6** | **79.4** | **6.1** | | |
| | Average, flint varieties | **35.76** | **1.20** | **6.49** | **1.68** | **50.95** | **3.92** | **1.8** | **10.1** | **2.6** | **79.4** | **6.1** | | |
| | Average, dent varieties | **46.91** | **0.77** | **5.46** | **1.35** | **42.28** | **3.23** | **1.4** | **10.3** | **2.5** | **79.7** | **6.1** | | |
| 705 | Sorghum | 77.60 | 1.13 | 0.94 | 6.06 | 13.85 | 0.42 | 5.1 | 4.2 | 27.0 | 61.8 | 1.9 | N. J. Ex. Sta. Rep., 1883, p. 75 | 705 |
| 706 | Do | 74.92 | 1.19 | 0.66 | 6.53 | 16.51 | 0.19 | 4.7 | 2.6 | 26.0 | 66.0 | 0.7 | N. J. Ex. Sta. Rep., 1884, p. 106 | 706 |
| 707 | Do | 76.65 | 0.79 | 0.56 | 5.90 | 15.90 | 0.20 | 3.4 | 2.4 | 25.3 | 68.0 | 0.9 | ....do.... | 707 |
| 708 | Do | 71.94 | 1.19 | 0.92 | 6.79 | 19.02 | 0.14 | 4.2 | 3.3 | 24.2 | 67.9 | 0.4 | ....do.... | 708 |
| 709 | Do *b* | 78.03 | 0.88 | 0.66 | 6.14 | 13.83 | 0.46 | 4.0 | 3.0 | 27.9 | 63.0 | 2.1 | N. J. Ex. Sta. Rep., 1884, p. 107 | 709 |
| 710 | Do | 77.28 | 1.14 | 1.08 | 6.98 | 13.11 | 0.41 | 5.0 | 4.8 | 30.7 | 57.7 | 1.8 | Mo. Ex. Sta. Bul. 7, 1889 | 710 |
| | Maximum | 78.03 | 1.19 | 0.94 | 6.79 | 19.02 | 0.46 | 5.1 | 4.8 | 30.7 | 68.0 | 2.1 | | |
| | Minimum | 71.94 | 0.79 | 0.56 | 5.90 | 13.83 | 0.14 | 3.4 | 2.4 | 24.2 | 57.7 | 0.4 | | |
| | Average | **76.07** | **1.05** | **0.80** | **6.40** | **15.38** | **0.30** | **4.4** | **3.3** | **26.8** | **64.2** | **1.3** | | |
| | Rowen from mixed grasses ensiled: | | | | | | | | | | | | | |
| 711 | In silo 11 months. For analysis of same crop sun-dried see No. 1392. | 18.44 | 7.15 | 10.07 | 22.78 | 35.97 | 5.69 | 8.7 | 12.4 | 27.9 | 44.0 | 7.0 | Mass. State Ex. Sta. Rep., 1886, p. 66 | 711 |
| 712 | Put into silo Oct. 5, after several hard frosts; on top of 15 feet of corn silage; too ripe. | 59.59 | 3.13 | 4.08 | 10.40 | 20.67 | 2.13 | 7.8 | 10.1 | 25.7 | 51.1 | 5.3 | Vt. Ex. Sta. Rep., 1887, p. 124 | 712 |
| 713 | Rye silage | 80.75 | 1.62 | 2.42 | 5.76 | 9.18 | 0.27 | 8.4 | 12.6 | 30.0 | 47.6 | 1.4 | N. J. Ex. Sta. Rep., 1883, p. 75 | 713 |

* Plant in rows 3 feet 9 inches apart; stalks 10 inches apart.
† Particulars given in *loc. cit.* as to manuring, distance of planting, time of harvesting, mode of cutting, and yield.
‡ In *loc. cit.*, lactic acid and acetic acid given.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | SILAGE—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 714 | Brewers' grains, ensiled | 66.77 | 1.44 | 6.94 | 5.43 | 16.86 | 2.57 | 4.3 | 20.9 | 16.4 | 50.7 | 7.7 | N. J. Ex. Sta. Rep., 1880, p. 46 | 714 |
| 715 | Do | 68.85 | 1.22 | 7.14 | 4.62 | 16.23 | 1.96 | 3.9 | 23.0 | 14.8 | 52.0 | 6.3 | N. J. Ex. Sta. Rep., 1884, p. 107 | 715 |
| 716 | Do | 73.86 | 0.96 | 5.85 | 3.89 | 13.65 | 1.79 | 3.7 | 22.4 | 14.9 | 52.1 | 6.9 | do | 716 |
| | Average | **69.82** | **1.21** | **6.64** | **4.65** | **15.61** | **2.07** | **4.0** | **22.0** | **15.4** | **51.7** | **6.9** | | |
| 717 | Red clover silage | 78.56 | 2.92 | 3.00 | 6.29 | 8.12 | 1.11 | 13.5 | 14.0 | 29.4 | 37.9 | 5.2 | N. J. Ex. Sta. Rep., 1881, p. 55 | 717 |
| 718 | Do | 72.60 | 2.69 | 3.81 | 8.57 | 11.40 | 0.93 | 9.8 | 13.9 | 31.3 | 41.6 | 3.4 | N. J. Ex. Sta. Rep., 1883, p. 75 | 718 |
| 719 | Do | 77.66 | 1.90 | 3.20 | 5.12 | 11.10 | 1.02 | 8.5 | 14.3 | 23.0 | 49.6 | 4.6 | Wis. Ex. Sta. Rep., 1886, p. 99 | 719 |
| 720 | Put into silo Sept. 6–8; taken out Mar. 5; quality good. *a* | 61.39 | 2.95 | 5.89 | 13.90 | 14.28 | 1.59 | 7.6 | 15.3 | 36.0 | 37.0 | 4.1 | Wis. Ex. Sta. Rep., 1888, p. 85 | 720 |
| 721 | Put into silo October; taken out Mar. 31; quality good. *a* | 69.52 | 2.56 | 5.07 | 8.01 | 13.72 | 1.12 | 8.4 | 16.6 | 26.3 | 45.0 | 3.7 | do | 721 |
| | Maximum | 78.56 | 2.95 | 5.89 | 13.90 | 14.28 | 1.59 | 13.5 | 16.6 | 36.0 | 49.6 | 5.2 | | |
| | Minimum | 61.39 | 1.90 | 3.00 | 5.12 | 8.12 | 0.93 | 7.6 | 13.9 | 23.0 | 37.0 | 3.4 | | |
| | Average | **71.95** | **2.60** | **4.19** | **8.38** | **11.73** | **1.15** | **9.3** | **15.0** | **29.9** | **41.7** | **4.1** | | |
| 722 | Cowpea vines, ensiled, var. Whip-poor-will | 81.64 | 1.99 | 2.40 | 5.57 | 7.60 | 0.80 | 10.8 | 13.1 | 30.4 | 41.3 | 4.4 | N. C. Ex. Sta. Rep., 1882, p. 138 | 722 |
| 723 | Cabbage silage | 87.61 | 4.16 | 1.19 | 1.59 | 4.52 | 0.93 | 33.6 | 9.6 | 12.8 | 36.5 | 7.5 | Conn. State Ex. Sta. Rep., 1881, p. 89 | 723 |
| 724 | Apple pomace silage | 85.33 | 0.62 | 1.20 | 3.26 | 8.51 | 1.08 | 4.2 | 8.2 | 22.2 | 58.0 | 7.4 | Mass. Ex. Sta. Rep., 1886, p. 67 | 724 |
| | HAY AND OTHER DRIED COARSE FODDERS. | | | | | | | | | | | | | |
| | CORN (MAIZE) FODDER. | | | | | | | | | | | | | |
| | Corn (maize) fodder, cured: | | | | | | | | | | | | | |
| 725 | Variety unknown | 14.96 | 5.95 | 3.39 | 25.36 | 49.16 | 1.18 | 7.1 | 4.0 | 29.9 | 57.6 | 1.4 | N. J. Ex. Sta. Rep., 1880, p. 47 | 725 |
| 726 | Do | 14.84 | 4.47 | 5.76 | 25.93 | 47.55 | 1.45 | 5.3 | 6.8 | 30.4 | 55.8 | 1.7 | Conn. State Ex. Sta. Rep., 1881, p. 88 | 726 |
| 727 | Variety unknown, frost bitten | 8.83 | 4.43 | 7.86 | 26.48 | 50.52 | 1.88 | 4.9 | 8.6 | 29.1 | 55.4 | 2.0 | Mass. Bd. of Agr. Rep., 1883, p. 318 | 727 |
| 728 | Variety unknown | 6.67 | 4.76 | 5.76 | 31.51 | 50.16 | 1.04 | 5.1 | 6.2 | 33.8 | 53.8 | 1.1 | Mass. Bd. of Agr. Rep., 1883, p. 320 | 728 |
| 729 | Do | 6.65 | 4.37 | 6.38 | 29.30 | 51.98 | 1.32 | 4.7 | 6.8 | 31.4 | 55.7 | 1.4 | Mass. Bd. of Agr. Rep., 1883, p. 319 | 729 |
| 730 | Do | 16.23 | 6.43 | 4.29 | 23.27 | 48.20 | 1.58 | 7.2 | 5.1 | 27.9 | 47.9 | 1.9 | Mo. State Agr. Col., Bul. 11, 1884 | 730 |
| 731 | Do. *a* | 7.12 | 4.34 | 9.76 | 16.29 | 59.91 | 2.46 | 4.7 | 10.5 | 17.6 | 64.5 | 2.7 | Ill. Ex. Sta. Bul. 2, 1888 | 731 |
| 732 | Pride of the North, cut Sept. 16; used in feeding experiments. | 18.66 | 4.22 | 7.85 | 21.93 | 45.88 | 1.46 | 5.2 | 9.7 | 27.0 | 56.3 | 1.8 | Wis. Ex. Sta. Rep., 1888, p. 31 | 732 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 733 | Pride of the North; cut Sept. 16, cured at first one month in the field, then in the barn until March; No. 80 is same crop, freshcut; No.741 the same field-cured. | 17.72 | 4.69 | 8.53 | 25.55 | 41.94 | 1.57 | 5.7 | 10.4 | 31.0 | 51.0 | 1.9 | Wis. Ex. Sta. Rep., 1888, p. 85 | 733 |
| 734 | Variety unknown | 39.00 | 4.57 | 3.88 | 20.47 | 30.52 | 1.56 | 7.3 | 6.2 | 33.6 | 50.4 | 2.5 | N. J. Ex. Sta. Rep., 1881, p. 52 | 734 |
| 735 | Do | 22.93 | 5.46 | 4.63 | 24.69 | 40.82 | 1.47 | 7.1 | 6.0 | 32.1 | 52.9 | 1.9 | do | 735 |
| 736 | Do | 39.37 | 4.63 | 3.84 | 18.65 | 32.85 | 0.66 | 7.6 | 6.3 | 30.8 | 54.2 | 1.1 | N. J. Ex. Sta. Rep., 1882, p. 80 | 736 |
| 737 | Do | 38.63 | 3.95 | 4.59 | 21.27 | 30.95 | 0.61 | 6.3 | 7.3 | 34.7 | 50.7 | 1.0 | N. J. Ex. Sta. Rep., 1883, p. 75 | 737 |
| 738 | Do | 24.85 | 4.48 | 6.83 | 14.39 | 47.80 | 1.65 | 6.0 | 9.1 | 19.2 | 63.5 | 2.2 | Ill. Ex. Sta., Bul. 2, 1888 | 738 |
| 739 | White-Edged Dent | 24.39 | 2.26 | 6.02 | 21.08 | 44.38 | 1.87 | 2.9 | 7.9 | 28.0 | 58.8 | 2.4 | Conn. Ex. Sta. Rep., 1888 | 739 |
| 740 | Pride of the North, dent, cut when glazing *c* | 24.87 | 3.86 | 6.22 | 16.72 | 46.36 | 1.97 | 5.1 | 8.3 | 22.3 | 61.7 | 2.6 | Mass. Ex. Sta. Rep., 1888, p. 84 | 740 |
| 741 | Pride of the North, dent; No. 80 same crop cut green; No. 733 same crop cured in barn.* | 34.77 | 3.62 | 4.87 | 23.37 | 32.41 | 0.96 | 5.4 | 7.5 | 35.8 | 49.8 | 1.5 | Wis. Ex. Sta. Rep., 1888, p. 85 | 741 |
| 742 | Variety unknown | 56.49 | 2.71 | 3.40 | 15.46 | 20.64 | 1.30 | 6.2 | 7.8 | 35.5 | 47.5 | 3.0 | N. Y. Ex. Sta. Rep., 1885, p. 304 | 742 |
| 743 | Do | 51.52 | 3.74 | 3.51 | 19.18 | 20.90 | 1.11 | 7.8 | 7.2 | 39.6 | 43.1 | 2.3 | do | 743 |
| | White-Edged Dent, 1,000 pounds ammoniated superphosphate per acre— | | | | | | | | | | | | | |
| 744 | One stalk in 4 feet *b h i j*† | 60.17 | 1.74 | 4.01 | 8.35 | 24.50 | 1.23 | 4.4 | 10.1 | 21.0 | 61.4 | 3.1 | Conn. Ex. Sta. Rep., 1889, p. 23 | 744 |
| 745 | One stalk in 2 feet *b h i j*† | 51.68 | 1.59 | 4.49 | 9.03 | 31.53 | 1.68 | 3.3 | 9.3 | 18.7 | 65.2 | 3.5 | do | 745 |
| 746 | One stalk to a foot *b h i j*† | 51.78 | 1.59 | 3.85 | 9.32 | 31.84 | 1.62 | 3.3 | 8.0 | 19.3 | 66.0 | 3.4 | do | 746 |
| 747 | Two stalks to a foot *b h i j*† | 46.47 | 1.73 | 4.01 | 10.38 | 35.59 | 1.82 | 3.2 | 7.5 | 19.4 | 66.5 | 3.4 | do | 747 |
| 748 | Four stalks to a foot *b h i j*† | 51.71 | 1.55 | 3.06 | 11.84 | 30.65 | 1.19 | 3.2 | 6.3 | 24.5 | 63.6 | 2.4 | do | 748 |
| 749 | Eight stalks to a foot *b h i j*† | 53.08 | 1.47 | 2.72 | 12.52 | 29.19 | 1.02 | 3.1 | 5.8 | 26.7 | 62.2 | 2.2 | do | 749 |
| | White-Edged Dent, 2,000 pounds ammoniated superphosphate per acre— | | | | | | | | | | | | | |
| 750 | Two stalks to a foot *b h i j*† | 50.95 | 1.66 | 3.83 | 9.73 | 32.23 | 1.60 | 3.4 | 7.8 | 19.8 | 65.7 | 3.3 | do | 750 |
| 751 | Four stalks to a foot *b h i j*† | 55.23 | 1.66 | 2.94 | 11.39 | 27.61 | 1.17 | 3.7 | 6.6 | 25.5 | 61.6 | 2.6 | do | 751 |
| | Rhode Island White Cap (flint), 1,000 pounds ammoniated superphosphate per acre— | | | | | | | | | | | | | |
| 752 | One stalk in 4 feet *b h i j*† | 51.61 | 1.98 | 5.42 | 8.03 | 31.29 | 1.67 | 4.1 | 11.2 | 16.6 | 64.7 | 3.4 | do | 752 |
| 753 | One stalk in 2 feet *b h i j*† | 49.82 | 1.77 | 5.64 | 7.47 | 33.49 | 1.81 | 3.5 | 11.3 | 14.9 | 66.7 | 3.6 | do | 753 |
| 754 | One stalk to a foot *b h i j*† | 43.36 | 2.01 | 5.22 | 10.18 | 37.22 | 2.01 | 3.6 | 9.2 | 18.0 | 65.7 | 3.5 | do | 754 |
| 755 | Two stalks to a foot *b h i j*† | 47.22 | 1.89 | 5.07 | 8.03 | 35.73 | 2.06 | 3.6 | 9.6 | 15.2 | 67.7 | 3.9 | do | 755 |
| 756 | Four stalks to a foot *b h i j*† | 44.02 | 1.97 | 4.60 | 9.96 | 37.37 | 2.08 | 3.5 | 8.2 | 17.8 | 66.8 | 3.7 | do | 756 |
| 757 | Eight stalks to a foot *b h i j*† | 47.22 | 1.85 | 3.62 | 12.65 | 33.25 | 1.41 | 3.5 | 6.9 | 24.0 | 62.9 | 2.7 | do | 757 |
| 758 | White-Edged Dent, 1,000 pounds ammoniated superphosphate per acre— | 42.93 | 2.17 | 4.18 | 13.04 | 35.95 | 1.73 | 3.8 | 7.3 | 22.6 | 63.1 | 3.2 | do | 758 |
| 759 | One stalk in 4 feet *b h i j*‡ | 37.90 | 2.20 | 5.40 | 11.70 | 40.80 | 2.00 | 3.6 | 8.7 | 18.8 | 65.7 | 3.2 | Conn. Ex. Sta. Rep., 1889, p. 222 | 759 |
| 760 | One stalk in 2 feet *b h i j*‡ | 37.10 | 2.10 | 5.00 | 11.60 | 42.00 | 2.20 | 3.3 | 7.9 | 18.4 | 66.9 | 3.5 | do | 760 |
| 761 | One stalk to a foot *b h i j*‡ | 32.90 | 2.30 | 4.30 | 13.00 | 45.40 | 2.10 | 3.4 | 6.4 | 19.4 | 67.7 | 3.1 | do | 761 |
| 762 | Two stalks to a foot *b h i j*‡ | 35.30 | 2.30 | 3.70 | 15.50 | 41.40 | 1.80 | 3.5 | 5.7 | 24.1 | 63.9 | 2.8 | do | 762 |
| 763 | Four stalks to a foot *b h i j*‡ | 43.10 | 2.10 | 3.20 | 14.90 | 35.30 | 1.40 | 3.7 | 5.6 | 26.4 | 61.8 | 2.5 | do | 763 |
| 764 | Eight stalks to a foot *b h i j*‡ | 51.00 | 2.10 | 2.90 | 13.90 | 28.90 | 1.20 | 4.3 | 5.9 | 28.3 | 59.0 | 2.5 | do | 764 |
| 765 | Dent | 36.85 | 3.03 | 6.19 | 13.89 | 38.78 | 1.26 | 4.8 | 9.8 | 22.0 | 61.4 | 2.0 | Mass. Ex. Sta. Rep., 1889, p. 33 | 765 |
| 766 | Smedley Yellow Dent | 32.29 | 3.86 | 6.16 | 17.40 | 38.39 | 1.90 | 5.7 | 9.1 | 25.7 | 56.7 | 2.8 | Wis. Ex. Sta. Rep., 1889, p. 73 | 766 |

*See No. 661.

†Crop of 1888 raised on same field in rows 4 feet apart.

‡Crop of 1889 raised on same field in rows 4 feet apart.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **HAY AND OTHER DRIED COARSE FODDERS—Continued.** | | | | | | | | | | | | | |
| | CORN (MAIZE) FODDER—continued. | | | | | | | | | | | | | |
| | Corn (maize) fodder, cured—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 767 | Dent, Sibley Sheep-Tooth | 38.58 | 2.70 | 4.30 | 17.01 | 36.00 | 1.41 | 4.4 | 7.0 | 27.7 | 58.6 | 2.3 | Wis. Ex. Sta. Rep., 1889, p. 108 | 767 |
| 768 | Dent | 27.22 | 4.41 | 4.83 | 24.43 | 36.62 | 2.49 | 6.0 | 6.6 | 33.8 | 50.2 | 3.4 | Pa. Ex. Sta. Bul. 9, 1889 | 768 |
| | All analyses. Maximum | 60.17 | 5.46 | 6.83 | 24.69 | 47.80 | 2.49 | 7.8 | 11.3 | 39.6 | 67.7 | 3.9 | | |
| | All analyses. Minimum | 22.93 | 1.47 | 2.72 | 7.47 | 20.64 | 0.61 | 2.9 | 5.6 | 14.9 | 43.1 | 1.0 | | |
| | All analyses. Average | **42.18** | **2.66** | **4.47** | **14.30** | **34.82** | **1.57** | **4.6** | **7.8** | **24.7** | **60.1** | **2.8** | | |
| | Corn (maize) leaves, field-cured: | | | | | | | | | | | | | |
| 769 | 64.31 per cent of the stover | 14.75 | 7.38 | 6.38 | 25.08 | 44.13 | 2.19 | 8.8 | 7.5 | 29.1 | 52.0 | 2.6 | Pa. Ex. Sta. Rep., 1887, p. 154 | 769 |
| 770 | 32 per cent of the stover | 44.02 | 5.04 | 4.91 | 17.98 | 27.28 | 0.77 | 9.0 | 8.8 | 32.1 | 48.4 | 1.7 | Conn. State Ex. Sta. Rep., 1887, p. 124 | 770 |
| | Rhode Island White Cap (flint); planted in rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre— | | | | | | | | | | | | | |
| 771 | One stalk in 4 feet | 39.92 | 5.55 | 6.29 | 17.39 | 29.54 | 1.31 | 9.4 | 10.7 | 29.5 | 48.2 | 2.2 | Conn. State Ex. Sta. Rep., 1889, p. 24 | 771 |
| 772 | One stalk in 2 feet | 36.16 | 5.51 | 6.44 | 19.18 | 31.48 | 1.23 | 8.8 | 10.3 | 30.7 | 48.3 | 1.9 | do | 772 |
| 773 | One stalk to a foot | 42.80 | 5.17 | 4.96 | 17.74 | 28.30 | 1.03 | 8.9 | 8.4 | 30.9 | 50.0 | 1.8 | do | 773 |
| 774 | Two stalks to a foot | 35.26 | 5.81 | 5.31 | 20.28 | 32.22 | 1.16 | 8.9 | 8.2 | 31.2 | 50.0 | 1.7 | do | 774 |
| 775 | Four stalks to a foot | 22.53 | 5.73 | 5.41 | 27.40 | 37.39 | 1.54 | 7.4 | 7.0 | 35.6 | 49.0 | 2.0 | do | 775 |
| 776 | Eight stalks to a foot | 28.48 | 4.28 | 4.65 | 22.54 | 38.75 | 1.30 | 6.0 | 6.5 | 31.4 | 54.3 | 1.8 | do | 776 |
| | Rhode Island White Cap (flint), planted in rows 4 feet apart, 2,000 pounds ammoniated superphosphate per acre— | | | | | | | | | | | | | |
| 777 | Eight stalks to a foot | 32.89 | 5.58 | 5.18 | 20.55 | 34.40 | 1.40 | 8.4 | 7.8 | 30.8 | 50.9 | 2.1 | do | 777 |
| | White-Edged Dent; planted in rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre— | | | | | | | | | | | | | |
| 778 | One stalk in 4 feet | 33.64 | 6.11 | 8.28 | 18.72 | 31.74 | 1.52 | 9.2 | 12.4 | 28.1 | 48.1 | 2.2 | do | 778 |
| 779 | One stalk in 2 feet | 26.70 | 5.52 | 7.36 | 20.95 | 38.15 | 1.32 | 7.7 | 10.3 | 29.3 | 50.9 | 1.8 | do | 779 |
| 780 | One stalk to a foot | 18.19 | 6.72 | 7.88 | 24.16 | 41.43 | 1.62 | 8.2 | 9.6 | 29.5 | 50.7 | 2.0 | do | 780 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 781 | Two stalks to a foot | 26.23 | 6.04 | 6.41 | 21.86 | 38.12 | 1.34 | 8.1 | 8.6 | 29.5 | 52.0 | 1.8 | do | 781 |
| 782 | Four stalks to a foot | 24.88 | 4.81 | 5.89 | 22.79 | 40.26 | 1.37 | 6.3 | 7.8 | 30.1 | 54.0 | 1.8 | do | 782 |
| 783 | Eight stalks to a foot | 32.19 | 3.67 | 4.45 | 22.06 | 36.44 | 1.19 | 5.5 | 6.7 | 32.4 | 53.6 | 1.8 | do | 783 |
| | White-Edged Dent, planted in rows 4 feet apart; 2,000 pounds ammoniated superphosphate per acre— | | | | | | | | | | | | | |
| 784 | Two stalks to a foot | 27.79 | 5.82 | 6.48 | 21.72 | 36.90 | 1.29 | 8.2 | 9.1 | 30.0 | 50.9 | 1.8 | do | 784 |
| 785 | Four stalks to a foot | 23.14 | 5.53 | 6.10 | 23.33 | 40.36 | 1.54 | 7.3 | 7.9 | 30.3 | 52.5 | 2.0 | do | 785 |
| | All analyses. Maximum | 44.02 | 7.38 | 8.28 | 27.40 | 44.13 | 2.19 | 9.4 | 12.4 | 35.6 | 54.3 | 2.6 | | |
| | All analyses. Minimum | 14.75 | 4.28 | 4.45 | 17.39 | 27.28 | 0.77 | 5.5 | 6.5 | 28.1 | 48.1 | 1.7 | | |
| | All analyses. Average | **29.97** | **5.54** | **6.02** | **21.40** | **35.70** | **1.37** | **7.9** | **8.6** | **30.5** | **51.0** | **2.0** | | |
| | Corn (maize) husks, field-cured: | | | | | | | | | | | | | |
| 786 | 22 per cent of the stover | 52.00 | 2.07 | 2.71 | 16.79 | 25.82 | 0.61 | 4.3 | 5.7 | 35.0 | 53.7 | 1.3 | Conn. State Ex. Sta. Rep., 1887, p. 124 | 786 |
| | Rhode Island White Cap (flint), planted in rows 4 feet apart, 1,000 pounds ammoniated superphosphate per acre— | | | | | | | | | | | | | |
| 787 | One stalk in 4 feet | 48.46 | 2.27 | 3.22 | 16.20 | 29.06 | 0.79 | 4.3 | 6.1 | 31.4 | 56.7 | 1.5 | Conn. State Ex. Sta. Rep., 1889, p. 25 | 787 |
| 788 | One stalk in 2 feet | 58.47 | 2.26 | 2.90 | 13.03 | 22.69 | 0.65 | 5.4 | 7.0 | 31.3 | 54.7 | 1.6 | do | 788 |
| 789 | One stalk to a foot | 53.94 | 2.05 | 2.44 | 14.71 | 26.23 | 0.65 | 4.3 | 5.1 | 31.9 | 57.3 | 1.4 | do | 789 |
| 790 | Two stalks to a foot | 51.93 | 2.26 | 1.95 | 16.18 | 26.98 | 0.70 | 4.9 | 4.1 | 33.6 | 55.9 | 1.5 | do | 790 |
| 791 | Four stalks to a foot | 33.64 | 2.07 | 2.60 | 22.69 | 38.18 | 0.83 | 3.1 | 3.9 | 34.0 | 57.8 | 1.2 | do | 791 |
| 792 | Eight stalks to a foot | 26.71 | 1.86 | 3.22 | 23.63 | 43.57 | 1.01 | 2.6 | 4.5 | 32.1 | 59.4 | 1.4 | do | 792 |
| 793 | Rhode Island White Cap (flint), planted in rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre; 8 stalks to a foot. | 45.72 | 1.84 | 2.54 | 17.81 | 31.36 | 0.73 | 3.3 | 4.6 | 33.5 | 57.3 | 1.3 | do | 793 |
| | White-Edged Dent, planted in rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre— | | | | | | | | | | | | | |
| 794 | One stalk in 4 feet | 63.59 | 1.47 | 2.06 | 11.96 | 20.37 | 0.55 | 3.9 | 5.6 | 32.9 | 56.1 | 1.5 | do | 794 |
| 795 | One stalk in 2 feet | 53.83 | 1.76 | 2.28 | 15.08 | 26.36 | 0.69 | 3.9 | 5.0 | 32.6 | 57.0 | 1.5 | do | 795 |
| 796 | One stalk to a foot | 50.98 | 1.54 | 2.12 | 15.96 | 28.72 | 0.68 | 3.1 | 4.2 | 32.4 | 58.9 | 1.4 | do | 796 |
| 797 | Two stalks to a foot | 48.44 | 1.68 | 2.42 | 16.61 | 30.05 | 0.80 | 3.2 | 4.6 | 32.3 | 58.4 | 1.5 | do | 797 |
| 798 | Four stalks to a foot | 48.70 | 1.37 | 2.84 | 15.18 | 31.14 | 0.77 | 2.7 | 5.7 | 29.5 | 60.6 | 1.5 | do | 798 |
| 799 | Eight stalks to a foot | 48.56 | 1.29 | 2.73 | 15.15 | 31.52 | 0.75 | 2.5 | 5.4 | 29.4 | 61.2 | 1.5 | do | 799 |
| | White-Edged Dent, planted in rows 4 feet apart; 2,000 pounds ammoniated superphosphate per acre— | | | | | | | | | | | | | |
| 800 | Two stalks to a foot | 52.93 | 1.73 | 2.59 | 14.92 | 27.03 | 0.81 | 3.6 | 5.3 | 31.9 | 57.6 | 1.6 | do | 800 |
| 801 | Four stalks to a foot | 76.60 | 0.61 | 1.28 | 6.79 | 14.26 | 0.46 | 2.6 | 5.4 | 28.9 | 61.1 | 2.0 | do | 801 |
| | All analyses. Maximum | 76.60 | 2.27 | 3.22 | 23.63 | 43.57 | 1.01 | 5.4 | 7.0 | 35.0 | 61.2 | 2.0 | | |
| | All analyses. Minimum | 26.71 | 0.61 | 1.28 | 6.79 | 14.26 | 0.46 | 2.5 | 3.9 | 28.9 | 53.7 | 1.2 | | |
| | All analyses. Average | **50.90** | **1.76** | **2.49** | **15.79** | **28.34** | **0.72** | **3.5** | **5.0** | **32.2** | **57.9** | **1.4** | | |

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **HAY AND OTHER DRIED COARSE FODDERS—Continued.** | | | | | | | | | | | | | |
| | CORN (MAIZE) FODDER—continued. | | | | | | | | | | | | | |
| | Corn (maize) stalks, field-cured: | | | | | | | | | | | | | |
| | Rhode Island White Cap, planted in rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre— | % | % | % | % | % | % | % | % | % | % | % | | |
| 802 | One stalk in 4 feet | 76.14 | 1.55 | 2.84 | 6.88 | 12.12 | 0.46 | 6.5 | 11.9 | 28.8 | 50.9 | 1.9 | Conn. State Ex. Sta. Rep., 1889, p. 25 | 802 |
| 803 | One stalk in 2 feet | 74.93 | 1.22 | 2.38 | 8.35 | 12.73 | 0.39 | 4.9 | 9.5 | 33.3 | 50.7 | 1.6 | ....do | 803 |
| 804 | One stalk to a foot | 59.66 | 1.88 | 2.83 | 14.02 | 20.75 | 0.86 | 4.7 | 7.0 | 34.8 | 51.4 | 2.1 | ....do | 804 |
| 805 | Two stalks to a foot | 67.28 | 1.67 | 1.76 | 11.89 | 16.97 | 0.43 | 5.1 | 5.4 | 36.4 | 51.8 | 1.3 | ....do | 805 |
| 806 | Four stalks to a foot | 78.53 | 0.86 | 1.15 | 7.96 | 11.18 | 0.32 | 4.0 | 5.4 | 37.0 | 52.1 | 1.5 | ....do | 806 |
| 807 | Eight stalks to a foot | 70.32 | 0.81 | 1.83 | 9.47 | 17.00 | 0.57 | 2.7 | 6.2 | 31.9 | 57.3 | 1.9 | ....do | 807 |
| 808 | Rhode Island White Cap, planted in rows 4 feet apart; 2,000 pounds ammoniated superphosphate per acre, 8 stalks to a foot. | 51.33 | 1.95 | 2.98 | 16.80 | 25.98 | 0.98 | 4.0 | 6.1 | 34.5 | 53.4 | 2.0 | ....do | 808 |
| | White-Edged Dent, planted in rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre— | | | | | | | | | | | | | |
| 809 | One stalk in 4 feet | 76.25 | 1.22 | 1.90 | 8.51 | 11.70 | 0.42 | 5.1 | 8.0 | 35.8 | 49.3 | 1.8 | ....do | 809 |
| 810 | One stalk in 2 feet | 73.98 | 0.99 | 1.68 | 9.64 | 13.27 | 0.44 | 3.8 | 6.5 | 37.1 | 50.9 | 1.7 | ....do | 810 |
| 811 | One stalk to a foot | 68.47 | 1.05 | 1.53 | 11.97 | 16.48 | 0.50 | 3.3 | 4.8 | 38.1 | 52.2 | 1.6 | ....do | 811 |
| 812 | Two stalks to a foot | 61.06 | 1.07 | 1.62 | 14.89 | 20.84 | 0.52 | 2.7 | 4.2 | 38.2 | 53.5 | 1.4 | ....do | 812 |
| 813 | Four stalks to a foot | 66.47 | 0.69 | 1.38 | 10.86 | 20.14 | 0.46 | 2.1 | 4.1 | 32.4 | 60.0 | 1.4 | ....do | 813 |
| 814 | Eight stalks to a foot | 66.70 | 0.63 | 1.37 | 10.25 | 20.63 | 0.42 | 1.9 | 4.1 | 30.8 | 61.9 | 1.3 | ....do | 814 |
| | White-Edged Dent, planted in rows 4 feet apart; 2,000 pounds ammoniated superphosphate per acre— | | | | | | | | | | | | | |
| 815 | Two stalks to a foot | 67.69 | 0.94 | 1.49 | 12.02 | 17.42 | 0.44 | 2.9 | 4.6 | 37.2 | 54.0 | 1.3 | ....do | 815 |
| 816 | Four stalks to a foot | 67.47 | 0.84 | 1.53 | 10.84 | 18.73 | 0.59 | 2.6 | 4.7 | 33.3 | 57.6 | 1.8 | ....do | 816 |
| 817 | Variety unknown | 22.63 | 5.35 | 6.47 | 28.43 | 35.87 | 1.25 | 6.9 | 8.4 | 36.7 | 46.3 | 1.7 | N. Y. State Ex. Sta. Rep., 1888, p. 238 | 817 |
| 818 | Tops of stalks, 4.60 per cent of the stover *a* | 14.35 | 5.12 | 3.52 | 30.54 | 45.08 | 1.16 | 6.0 | 4.1 | 35.8 | 52.8 | 1.3 | Pa. Ex. Sta. Rep., 1887, p. 154 | 818 |
| 819 | Butts of stalks, 10.24 per cent of the stover. *a* | 16.29 | 4.96 | 3.49 | 30.71 | 42.36 | 1.80 | 6.0 | 4.2 | 36.7 | 50.9 | 2.2 | ....do | 819 |
| 820 | Middle portion of stalks, 17.67 per cent of the stover. *a* * | 15.72 | 4.39 | 2.71 | 30.50 | 44.87 | 1.07 | 5.2 | 3.2 | 36.2 | 53.1 | 1.3 | ....do | 820 |
| 821 | Upper half of stalks, 12 per cent of the stover. | 45.67 | 2.46 | 1.88 | 22.57 | 26.76 | 0.66 | 4.5 | 3.5 | 41.5 | 49.3 | 1.2 | Conn. State Ex. Sta. Rep., 1887, p. 124 | 821 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 822 | Lower half of stalks, 34 per cent of the stover. | 65.94 | 1.22 | 1.10 | 15.03 | 16.23 | 0.48 | 3.6 | 3.2 | 44.2 | 47.6 | 1.4 | ....do | 822 |
| | All analyses, excluding Nos. 817-822. Maximum | 78.53 | 1.95 | 2.98 | 16.80 | 25.08 | 0.98 | 6.5 | 11.9 | 38.2 | 61.9 | 2.1 | | |
| | All analyses, excluding Nos. 817-822. Minimum | 51.33 | 0.63 | 1.15 | 6.88 | 11.18 | 0.32 | 1.9 | 4.1 | 28.8 | 49.3 | 1.3 | | |
| | All analyses, excluding Nos. 817-822. Average | 68.42 | 1.16 | 1.88 | 10.96 | 17.06 | 0.52 | 3.6 | 5.9 | 34.8 | 54.1 | 1.6 | | |
| | Corn (maize) stover, field-cured: | | | | | | | | | | | | | |
| 823 | Norfolk White (dent), raised on land long tilled. | 27.59 | 4.76 | 4.97 | 24.76 | 36.37 | 1.55 | 6.5 | 6.8 | 34.2 | 50.3 | 2.2 | Am. Jour. Sci. and Arts, 1877, p. 203 | 823 |
| 824 | Norfolk White (dent), raised on new land | 26.92 | 3.62 | 3.79 | 25.18 | 39.42 | 1.07 | 4.9 | 5.2 | 34.5 | 54.0 | 1.4 | ....do | 824 |
| 825 | Ohio Dent | 36.49 | 2.87 | 4.63 | 19.08 | 35.78 | 1.16 | 4.5 | 7.3 | 30.0 | 56.4 | 1.8 | Conn. State Ex. Sta. Rep., 1878, p. 60 | 825 |
| 826 | White-Edged Dent | 23.13 | 4.34 | 7.19 | 27.24 | 36.45 | 1.65 | 5.7 | 9.4 | 35.4 | 47.4 | 2.1 | Conn. State Ex. Sta. Rep., 1881, p. 88 | 826 |
| 827 | Topover corn | 25.00 | 4.59 | 4.85 | 27.08 | 36.61 | 1.87 | 6.1 | 6.5 | 36.1 | 48.8 | 2.5 | Mass. State Ex. Sta. Rep., 1885, p. 81 | 827 |
| 828 | Variety unknown | 15.44 | 6.58 | 8.30 | 23.40 | 44.63 | 1.65 | 7.8 | 9.8 | 27.7 | 52.7 | 2.0 | Ky. Ex. Sta. Bul. 2, 1886 | 828 |
| 829 | Do | 16.23 | 6.47 | 4.85 | 24.91 | 46.18 | 1.36 | 7.7 | 5.8 | 29.7 | 55.2 | 1.6 | Ky. Ex. Sta. Bul. 5, 1886 | 829 |
| 830 | Do | 18.00 | 7.00 | 4.30 | 25.44 | 43.94 | 1.32 | 8.5 | 5.2 | 31.0 | 53.7 | 1.6 | ....do | 830 |
| 831 | Western Dent | 16.67 | 3.47 | 5.54 | 29.53 | 43.37 | 1.42 | 4.2 | 6.6 | 35.4 | 52.1 | 1.7 | Mass. State Ex. Sta. Bul. 26, 1887 | 831 |
| 832 | Variety unknown | 15.40 | 3.57 | 7.75 | 17.71 | 53.34 | 2.23 | 4.2 | 9.2 | 20.9 | 63.1 | 2.6 | Mass. State Ex. Sta. Rep., 1887, p. 29 | 832 |
| 833 | White-Edged Dent *chij* | 48.65 | 3.50 | 3.89 | 16.69 | 26.39 | 0.88 | 6.8 | 7.6 | 32.5 | 51.4 | 1.7 | Conn. State Ex. Sta. Rep., 1887, p. 119 | 833 |
| 834 | Variety unknown *a* | 32.65 | 1.74 | 3.01 | 27.34 | 34.08 | 1.18 | 4.9 | 4.5 | 40.6 | 45.4 | 1.6 | Ill. Ex. Sta. Bul. 2, 1888 | 834 |
| 835 | Dent, 108 bushels of ears to the acre *a* | 15.53 | 6.36 | 5.76 | 25.87 | 44.49 | 1.99 | 7.6 | 6.7 | 30.5 | 52.8 | 2.4 | Pa. Ex. Sta. Bul. 3, 1888 | 835 |
| 836 | Variety unknown | 19.07 | 3.41 | 7.42 | 16.94 | 51.03 | 2.13 | 4.2 | 9.2 | 20.9 | 63.1 | 2.6 | Mass. Ex. Sta. Rep., 1888, p. 37 | 836 |
| | Flint variety— | | | | | | | | | | | | | |
| 837 | No fertilizer *hij* | 44.84 | 3.03 | 4.36 | 20.02 | 26.76 | 0.99 | 5.5 | 7.9 | 36.3 | 48.5 | 1.8 | Storrs School Ex. Sta. Rep., 1889, p. 149 | 837 |
| 838 | Nitrate of soda *hij* | 49.76 | 2.21 | 4.82 | 14.92 | 27.44 | 0.85 | 4.4 | 9.6 | 29.7 | 54.6 | 1.7 | ....do | 838 |
| 839 | Dissolved boneblack *hij* | 47.44 | 2.73 | 4.94 | 16.14 | 27.86 | 0.89 | 5.2 | 9.4 | 30.7 | 53.0 | 1.7 | ....do | 839 |
| 840 | Muriate of potash | 48.89 | 2.81 | 2.86 | 15.33 | 29.14 | 0.97 | 5.5 | 5.6 | 30.0 | 57.0 | 1.9 | ....do | 840 |
| 841 | Nitrate of soda, dissolved boneblack *hij* | 52.23 | 2.48 | 4.44 | 14.48 | 25.56 | 0.81 | 5.2 | 9.3 | 30.3 | 53.5 | 1.7 | ....do | 841 |
| 842 | Nitrate of soda, muriate of potash *hij* | 49.77 | 3.01 | 2.76 | 17.23 | 26.38 | 0.85 | 6.0 | 5.5 | 34.3 | 52.5 | 1.7 | ....do | 842 |
| 843 | Dissolved boneblack, muriate of potash (mixed minerals) *hij* | 54.57 | 2.43 | 2.09 | 14.13 | 25.78 | 1.00 | 5.4 | 4.6 | 31.1 | 56.7 | 2.2 | ....do | 843 |
| 844 | Mixed minerals as in No. 843; nitrate of soda ½ ration. *hij* | 52.96 | 2.68 | 2.26 | 16.09 | 25.21 | 0.80 | 5.7 | 4.8 | 34.2 | 53.6 | 1.7 | ....do | 844 |
| 845 | Mixed minerals as in No. 843; nitrate of soda ¾ ration. *hij* | 46.74 | 2.88 | 2.77 | 18.75 | 27.96 | 0.90 | 5.4 | 5.2 | 35.2 | 52.5 | 1.7 | ....do | 845 |
| 846 | Mixed minerals as in No. 843; nitrate of soda full ration. *hij* | 54.41 | 2.37 | 2.55 | 15.55 | 24.30 | 0.82 | 5.2 | 5.6 | 34.1 | 53.3 | 1.8 | ....do | 846 |
| 847 | Mixed minerals as in No. 843; sulphate ammonia ½ ration. *hij** | 55.18 | 2.42 | 2.29 | 14.39 | 24.87 | 0.85 | 5.4 | 5.1 | 32.1 | 55.5 | 1.9 | ....do | 847 |
| 848 | Mixed minerals as in No. 843; sulphate of ammonia ¾ ration. *hij* | 55.61 | 2.57 | 1.82 | 15.45 | 23.75 | 0.80 | 5.8 | 4.1 | 34.8 | 53.5 | 1.8 | ....do | 848 |
| 849 | Mixed minerals as in No. 843; sulphate of ammonia full ration. *hij* | 50.37 | 2.78 | 2.43 | 18.11 | 25.66 | 0.65 | 5.6 | 4.9 | 36.5 | 51.7 | 1.3 | ....do | 849 |
| 850 | Mixed minerals as in No. 843; dried blood ½ ration. *hij* | 57.44 | 2.38 | 1.96 | 14.17 | 23.28 | 0.77 | 5.6 | 4.6 | 33.3 | 54.7 | 1.8 | ....do | 850 |
| 851 | Mixed minerals as in No. 843; dried blood ¾ ration. *hij* | 55.78 | 2.43 | 1.99 | 15.34 | 23.62 | 0.84 | 5.5 | 4.5 | 34.7 | 53.4 | 1.9 | ....do | 851 |
| 852 | Mixed minerals as in No. 843; dried blood full ration. *hij* | 54.20 | 2.61 | 2.02 | 15.80 | 24.59 | 0.78 | 5.7 | 4.4 | 34.5 | 53.7 | 1.7 | ....do | 852 |

* Adds 99.26 (fresh or air-dry material).

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | HAY AND OTHER DRIED COARSE FODDERS—Continued. | | | | | | | | | | | | | |
| | CORN (MAIZE) FODDER—continued. | | | | | | | | | | | | | |
| | Corn (maize) stover, field cured—Continued. | | | | | | | | | | | | | |
| | Flint variety—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 853 | No fertilizer *h i j* | 44.01 | 3.19 | 3.58 | 18.98 | 29.06 | 1.18 | 5.7 | 6.4 | 33.9 | 51.9 | 2.1 | Storrs School Ex. Sta. Rep., 1889, p. 153 | 853 |
| 854 | Dissolved boneblack *h i j* | 38.20 | 3.34 | 2.90 | 21.51 | 32.81 | 1.24 | 5.4 | 4.7 | 34.8 | 53.1 | 2.0 | do | 854 |
| 855 | Muriate of potash *h i j* | 48.03 | 2.86 | 2.29 | 16.94 | 28.94 | 0.94 | 5.5 | 4.4 | 32.6 | 55.7 | 1.8 | do | 855 |
| 856 | Dissolved boneblack, muriate of potash (mixed minerals). *h i j* | 52.83 | 3.02 | 2.41 | 15.00 | 25.94 | 0.80 | 6.4 | 5.1 | 31.8 | 55.0 | 1.7 | do | 856 |
| 857 | Mixed minerals as in No. 856; nitrate of soda ½ ration. *h i j* | 39.50 | 3.27 | 2.96 | 20.51 | 32.67 | 1.09 | 5.4 | 4.9 | 33.9 | 54.0 | 1.8 | do | 857 |
| 858 | Mixed minerals as in No. 856; nitrate of soda ⅔ ration. *h i j* | 40.09 | 3.47 | 3.18 | 20.49 | 31.63 | 1.14 | 5.8 | 5.3 | 34.2 | 52.8 | 1.9 | do | 858 |
| 859 | Mixed minerals as in No. 856; nitrate of soda full ration. *h i j* | 45.02 | 3.08 | 3.08 | 19.24 | 28.43 | 1.15 | 5.6 | 5.6 | 35.0 | 51.7 | 2.1 | do | 859 |
| 860 | Mixed minerals as in No. 856; sulphate of ammonia ½ ration. *h i j* | 47.27 | 3.32 | 2.85 | 18.03 | 27.58 | 0.95 | 6.3 | 5.4 | 34.2 | 52.3 | 1.8 | do | 860 |
| 861 | Mixed minerals as in No. 856; sulphate of ammonia ⅔ ration. *h i j* | 47.91 | 2.92 | 2.66 | 19.22 | 26.56 | 0.73 | 5.6 | 5.1 | 36.9 | 51.0 | 1.4 | do | 861 |
| 862 | Mixed minerals as in No. 856; sulphate of ammonia full ration. *h i j* | 49.75 | 2.86 | 3.22 | 17.49 | 25.68 | 1.00 | 5.7 | 6.4 | 34.8 | 51.1 | 2.0 | do | 862 |
| 863 | Mixed minerals as in No. 856; dried blood ½ ration. *h i j* | 45.08 | 3.57 | 2.58 | 18.73 | 29.05 | 0.99 | 6.5 | 4.7 | 34.1 | 52.9 | 1.8 | do | 863 |
| 864 | Mixed minerals as in No. 856; dried blood ⅔ ration. *h i j* | 46.69 | 3.20 | 1.97 | 18.61 | 28.46 | 1.07 | 6.0 | 3.7 | 34.9 | 53.4 | 2.0 | do | 864 |
| 865 | Mixed minerals as in No. 856; dried blood full ration. *h i j* | 40.99 | 3.48 | 2.71 | 20.89 | 30.69 | 1.24 | 5.9 | 4.6 | 35.4 | 52.0 | 2.1 | do | 865 |
| 866 | No fertilizer *h i j* | 38.71 | 3.43 | 4.47 | 20.04 | 32.06 | 1.29 | 5.6 | 7.3 | 32.7 | 52.3 | 2.1 | Storrs School Ex. Sta. Rep., 1889, p. 157 | 866 |
| 867 | Nitrate of soda *h i j* | 39.63 | 3.58 | 5.19 | 19.92 | 30.73 | 1.15 | 5.6 | 8.6 | 33.0 | 50.9 | 1.9 | do | 867 |
| 868 | Dissolved boneblack *h i j* | 38.64 | 3.37 | 4.72 | 20.25 | 31.79 | 1.23 | 5.5 | 7.7 | 33.0 | 51.8 | 2.0 | do | 868 |
| 869 | Muriate of potash *h i j* | 45.86 | 3.19 | 3.84 | 17.98 | 28.05 | 1.08 | 5.9 | 7.1 | 33.2 | 51.8 | 2.0 | do | 869 |
| 870 | Nitrate of soda; dissolved boneblack *h i j* | 39.06 | 3.47 | 4.81 | 20.11 | 31.27 | 1.28 | 5.7 | 7.9 | 33.0 | 51.3 | 2.1 | do | 870 |
| 871 | Nitrate of soda, muriate of potash *h i j* | 39.23 | 3.34 | 5.04 | 19.93 | 31.31 | 1.15 | 5.5 | 8.3 | 32.8 | 51.5 | 1.9 | do | 871 |
| 872 | Dissolved boneblack; muriate of potash. *h i j* | 46.43 | 3.48 | 3.54 | 17.30 | 27.91 | 1.34 | 6.5 | 6.6 | 32.3 | 52.1 | 2.5 | do | 872 |
| 873 | Nitrate of soda, dissolved boneblack, muriate of potash. *h i j* | 42.77 | 3.38 | 4.98 | 19.29 | 28.44 | 1.14 | 5.9 | 8.7 | 33.7 | 49.7 | 2.0 | do | 873 |
| 874 | Plaster *h i j* | 33.51 | 3.66 | 3.79 | 22.54 | 35.24 | 1.26 | 5.5 | 5.7 | 33.9 | 53.0 | 1.9 | do | 874 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | White-Edged Dent, planted in rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre— | | | | | | | | | | | | | |
| 875 | One stalk in 4 feet | 40.54 | 3.91 | 3.91 | 20.31 | 30.54 | 0.79 | 6.5 | 6.6 | 34.2 | 51.4 | 1.3 | Conn. State Ex. Sta. Rep., 1889, p. 222 | 875 |
| 876 | One stalk in 2 feet | 40.89 | 3.82 | 2.92 | 20.73 | 30.92 | 0.72 | 6.4 | 4.9 | 35.1 | 52.4 | 1.2 | do | 876 |
| 877 | One stalk to a foot | 31.53 | 4.22 | 3.56 | 23.66 | 36.10 | 0.93 | 6.1 | 5.1 | 34.5 | 52.9 | 1.4 | do | 877 |
| 878 | Two stalks to a foot | 37.22 | 3.23 | 3.01 | 22.02 | 33.42 | 1.10 | 5.1 | 4.8 | 35.1 | 53.2 | 1.8 | do | 878 |
| 879 | Four stalks to a foot | 45.01 | 2.56 | 2.80 | 18.66 | 29.93 | 1.04 | 4.7 | 5.1 | 33.9 | 54.2 | 2.1 | do | 879 |
| 880 | Eight stalks to a foot | 53.63 | 2.46 | 2.52 | 15.92 | 24.53 | 0.94 | 5.3 | 5.4 | 34.3 | 52.9 | 2.1 | do | 880 |
| 881 | Variety unknown | 50.13 | 1.85 | 3.99 | 17.20 | 25.93 | 0.90 | 3.7 | 8.0 | 34.5 | 52.0 | 1.8 | Mass. State Ex. Sta. Rep., 1889, p. 33 | 881 |
| 882 | Do | 15.60 | 6.75 | 6.67 | 32.24 | 37.74 | 1.00 | 8.0 | 7.9 | 38.2 | 44.7 | 1.2 | Mass. State Ex. Sta. Rep., 1889, p. 143 | 882 |
| 883 | Do | 17.22 | 3.72 | 5.04 | 23.50 | 49.45 | 1.15 | 4.5 | 6.1 | 28.4 | 60.1 | 1.4 | do | 883 |
| | All analyses. Maximum | 57.44 | 7.00 | 8.30 | 32.24 | 53.34 | 2.23 | 8.0 | 9.8 | 40.6 | 63.1 | 2.6 | | |
| | All analyses. Minimum | 15.40 | 1.74 | 1.82 | 14.13 | 23.28 | 0.65 | 3.7 | 3.7 | 20.9 | 44.7 | 1.2 | | |
| | All analyses. Average | **40.13** | **3.43** | **3.82** | **19.75** | **31.75** | **1.12** | **5.7** | **6.4** | **33.0** | **53.2** | **1.7** | | |
| | Corn (maize) stover, cured: | | | | | | | | | | | | | |
| 884 | Variety unknown | 12.25 | 5.39 | 4.06 | 30.94 | 45.86 | 1.50 | 6.1 | 4.6 | 35.3 | 52.3 | 1.7 | N. J. Ex. Sta. Rep., 1882, p. 70 | 884 |
| 885 | Variety unknown, frost-bitten | 8.73 | 2.85 | 6.00 | 31.29 | 49.96 | 1.17 | 3.1 | 6.6 | 34.3 | 54.7 | 1.3 | Agr. of Mass., 1883, p. 319 | 885 |
| 886 | Variety unknown *b* | 9.72 | 4.82 | 4.00 | 33.60 | 47.04 | 0.82 | 5.3 | 4.4 | 37.2 | 52.1 | 1.0 | N. J. Ex. Sta. Rep., 1884, p. 107 | 886 |
| 887 | Do. *b* | 12.99 | 5.58 | 4.19 | 31.01 | 45.30 | 0.93 | 6.4 | 4.8 | 35.6 | 52.1 | 1.1 | do | 887 |
| 888 | Do. *b* | 11.60 | 4.78 | 4.19 | 31.40 | 46.74 | 1.29 | 5.4 | 4.7 | 35.5 | 52.9 | 1.5 | N. J. Ex. Sta. Rep., 1886, p. 160 | 888 |
| 889 | Dent *b* | 10.95 | 4.50 | 7.13 | 28.92 | 48.46 | 0.94 | 5.0 | 7.9 | 32.1 | 53.9 | 1.1 | do | 889 |
| 890 | Yellow flint *b* | 8.45 | 5.50 | 8.45 | 26.62 | 49.93 | 1.06 | 6.0 | 9.3 | 29.1 | 54.4 | 1.2 | do | 890 |
| 891 | Variety unknown | 7.86 | 4.40 | 5.00 | 28.73 | 52.91 | 1.10 | 4.8 | 5.4 | 31.2 | 57.4 | 1.2 | do | 891 |
| 892 | Do | 8.22 | 5.49 | 5.81 | 28.58 | 51.03 | 0.87 | 6.0 | 6.3 | 31.1 | 55.6 | 1.0 | do | 892 |
| 893 | Do | 8.38 | 5.36 | 5.38 | 28.80 | 51.18 | 0.90 | 5.9 | 5.9 | 31.4 | 55.8 | 1.0 | do | 893 |
| 894 | Do | 7.57 | 4.66 | 3.44 | 30.21 | 52.86 | 1.26 | 5.1 | 3.7 | 32.8 | 57.0 | 1.4 | do | 894 |
| 895 | Yellow dent *b* | 8.14 | 7.07 | 3.63 | 30.31 | 49.45 | 1.40 | 7.7 | 3.9 | 33.1 | 53.8 | 1.5 | do | 895 |
| 896 | Variety unknown | 8.30 | 6.40 | 6.74 | 30.14 | 46.44 | 1.97 | 7.0 | 7.3 | 32.8 | 50.8 | 2.1 | Ind. Ex. Sta. Bul. 24, 1889 | 896 |
| | HAY OF CEREAL GRASSES. | | | | | | | | | | | | | |
| 897 | Rye, cut May 25; in full bloom | 8.55 | 5.85 | 9.75 | 30.15 | 43.35 | 2.35 | 6.4 | 10.7 | 33.0 | 47.4 | 2.5 | Mass. State Ex. Sta. Rep., 1883, p. 79 | 897 |
| | Oats: | | | | | | | | | | | | | |
| 898 | Cut Aug. 26; plant matured | 8.70 | 5.58 | 5.52 | 33.15 | 44.67 | 2.38 | 6.1 | 6.1 | 36.3 | 48.9 | 2.6 | Mass. State Ex. Sta. Rep., 1883, p. 80 | 898 |
| 899 | Cut Aug. 1; in full bloom | 6.43 | 6.00 | 6.16 | 31.87 | 46.81 | 2.73 | 6.4 | 6.6 | 34.1 | 50.0 | 2.9 | Mass. State Ex. Sta. Rep., 1883, p. 81 | 899 |
| 900 | Cut July 9; seed in milk | 9.55 | 5.50 | 9.85 | 31.04 | 41.63 | 2.43 | 6.1 | 10.9 | 34.3 | 46.0 | 2.7 | Mass. State Ex. Sta. Rep., 1885, p. 64 | 900 |
| 901 | Time of cutting unknown | 8.70 | 7.45 | 7.75 | 25.10 | 47.95 | 3.05 | 8.1 | 8.4 | 27.5 | 52.6 | 3.4 | Ohio Ex. Sta. Rep., 1885, p. 234 | 901 |
| 902 | Cut when nearly ripe | 13.78 | 6.31 | 7.99 | 33.62 | 36.23 | 2.07 | 7.3 | 9.3 | 39.0 | 42.0 | 2.4 | Conn. State Ex. Sta. Rep., 1886, p. 113 | 902 |
| 903 | Time of cutting unknown | 6.15 | 6.30 | 8.56 | 21.05 | 53.39 | 4.55 | 6.7 | 9.1 | 22.4 | 56.9 | 4.9 | Vt. Ex. Sta. Rep., 1887, p. 123 | 903 |
| 904 | Barley, cut July 9; seed in milk | 10.25 | 4.44 | 9.21 | 26.14 | 47.49 | 2.47 | 5.0 | 10.2 | 29.1 | 52.9 | 2.8 | Mass. State Ex. Sta. Rep., 1885, p. 65 | 904 |
| | HAY OF GRASSES. | | | | | | | | | | | | | |
| | Couch, quitch, or wheat grass (*Agropyrum repens*): | | | | | | | | | | | | | |
| 905 | Cut 1879; grown in New Hampshire *a k* | 14.30 | 7.99 | 9.84 | 16.63 | 48.22 | 3.02 | 9.3 | 11.5 | 19.4 | 56.3 | 3.5 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 128. | 905 |
| 906 | Cut 1879; grown in Pennsylvania *a k* | 14.30 | 5.34 | 7.22 | 20.64 | 49.50 | 3.00 | 6.2 | 8.4 | 24.2 | 57.7 | 3.5 | do | 906 |
| 907 | Cut 1880; grown in Maine *a k* | 14.30 | 6.25 | 10.83 | 21.68 | 43.66 | 3.28 | 7.3 | 12.7 | 25.3 | 50.9 | 3.8 | do | 907 |
| 908 | Cut July 13; in bloom | 6.25 | 6.37 | 8.75 | 34.50 | 41.11 | 2.94 | 6.8 | 9.3 | 36.9 | 43.9 | 3.1 | Me. Ex. Sta. Rep., 1885–'86, p. 51 | 908 |
| 909 | In bloom (digestion coefficients given) | 10.85 | 4.83 | 8.50 | 33.94 | 38.52 | 3.36 | 5.4 | 9.5 | 38.1 | 43.2 | 3.8 | Me. Ex. Sta. Rep., 1888, p. 86 | 909 |

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **HAY AND OTHER DRIED COARSE FODDERS—Continued.** | | | | | | | | | | | | | |
| | HAY OF GRASSES—continued. | | | | | | | | | | | | | |
| | Fiorin (*Agrostis alba*), grown on a salt marsh: | % | % | % | % | % | % | % | % | % | % | % | | |
| 910 | Cut June 22, before bloom | 7.68 | 6.73 | 9.38 | 26.47 | 47.48 | 2.26 | 7.28 | 10.18 | 28.68 | 51.41 | 2.45 | Conn. State Ex. Sta. Rep., 1889, p. 245 | 910 |
| 911 | Cut August 12, seed gone (same locality as No. 910). | 6.83 | 4.92 | 5.19 | 27.53 | 53.92 | 1.61 | 5.28 | 5.57 | 29.55 | 57.87 | 1.73 | do | 911 |
| 912 | Cut June 28, in bloom | 9.08 | 8.64 | 8.69 | 24.48 | 46.65 | 2.46 | 9.52 | 9.57 | 26.94 | 51.28 | 2.69 | do | 912 |
| | Redtop, herd's grass (of Pa.), bent grass (*Agrostis vulgaris*): | | | | | | | | | | | | | |
| 913 | Cut July 1, grown in Pennsylvania *a k* | 14.30 | 5.90 | 8.48 | 21.71 | 46.77 | 2.84 | 6.9 | 9.9 | 25.3 | 54.6 | 3.3 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127. | 913 |
| 914 | Cut July 1, grown in Delaware *a k* | 14.30 | 5.60 | 9.64 | 18.75 | 48.68 | 3.03 | 6.5 | 11.3 | 21.7 | 57.0 | 3.5 | do | 914 |
| 915 | Cut when seeds were ripening; taken from stack. | 9.84 | 6.99 | 7.25 | 27.45 | 46.52 | 1.95 | 7.8 | 8.0 | 30.5 | 51.6 | 2.1 | Ky. Ex. Sta. Bul. 5, 1886, p. 22 | 915 |
| 916 | Cut July 5, in bloom; fertilized | 6.81 | 5.30 | 7.76 | 31.79 | 46.89 | 1.45 | 5.7 | 8.3 | 34.1 | 50.3 | 1.6 | Mass. State Ex. Sta. Rep., 1887, p. 126 | 916 |
| 917 | Cut July 5, in bloom; unfertilized | 7.75 | 4.77 | 7.75 | 30.40 | 47.82 | 1.51 | 5.2 | 8.4 | 32.9 | 51.9 | 1.6 | do | 917 |
| 918 | Cut July 22, in seed; fertilized | 8.24 | 4.44 | 5.88 | 30.73 | 49.33 | 1.38 | 4.8 | 6.4 | 33.5 | 53.8 | 1.5 | do | 918 |
| 919 | Cut July 22, in seed; unfertilized | 8.02 | 3.83 | 7.62 | 28.63 | 50.35 | 1.55 | 4.2 | 8.3 | 31.1 | 54.7 | 1.7 | do | 919 |
| 920 | In full bloom (digestion coefficients given) | 11.60 | 4.47 | 8.56 | 27.38 | 44.78 | 3.21 | 5.1 | 9.7 | 31.0 | 50.6 | 3.6 | Me. Ex. Sta. Rep., 1888, p. 86 | 920 |
| 921 | Time of cutting unknown | 10.00 | 6.50 | 10.43 | 24.00 | 46.76 | 2.31 | 7.2 | 11.6 | 26.7 | 51.9 | 2.6 | Ark. Ex. Sta. Rep., 1888, p. 132 | 921 |
| | All analyses, excluding Nos. 913 and 914. Maximum | 11.60 | 6.99 | 10.43 | 31.79 | 50.35 | 3.21 | 7.8 | 11.6 | 34.1 | 54.7 | 3.6 | | |
| | All analyses, excluding Nos. 913 and 914. Minimum | 6.81 | 3.83 | 5.88 | 24.00 | 44.78 | 1.38 | 4.2 | 6.4 | 21.7 | 50.3 | 1.5 | | |
| | All analyses, excluding Nos. 913 and 914. Average | **8.89** | **5.19** | **7.89** | **28.63** | **47.49** | **1.91** | **5.7** | **8.7** | **31.4** | **52.1** | **2.1** | | |
| | Average composition, cut in bloom, 3 analyses.* | **8.72** | **4.85** | **8.02** | **29.86** | **46.49** | **2.06** | **5.4** | **8.7** | **32.8** | **50.8** | **2.3** | | |
| | Blue stem, finger-spiked broom grass (*Andropogon provincialis*): | | | | | | | | | | | | | |
| 922 | Cut 1879; grown in Minnesota *a k* | 14.30 | 4.36 | 6.90 | 21.98 | 49.87 | 2.59 | 5.1 | 8.1 | 25.6 | 58.2 | 3.0 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 126. | 922 |
| 923 | Cut 1879; grown in Nebraska *a k* | 14.30 | 6.74 | 4.56 | 22.50 | 50.10 | 1.80 | 7.8 | 5.3 | 26.3 | 58.5 | 2.1 | do | 923 |
| 924 | Cut 1879; grown in Indian Territory *a k* | 14.30 | 3.50 | 3.39 | 26.72 | 49.36 | 2.73 | 4.1 | 3.9 | 31.2 | 57.6 | 3.2 | do | 924 |
| 925 | Cut Sept. 2, 1880; grown in Pennsylvania *a k* | 14.30 | 11.60 | 4.28 | 23.17 | 44.53 | 2.12 | 13.5 | 5.0 | 27.0 | 52.0 | 2.5 | do | 925 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Broom grass (*Andropogon scoparius*): | | | | | | | | | | | | | |
| 926 | Cut 1879; before bloom; grown in Alabama *a k* | 14.30 | 6.09 | 5.53 | 24.91 | 47.58 | 1.59 | 7.1 | 6.4 | 29.1 | 55.5 | 1.9 | ....do | 926 |
| 927 | Cut 1878; grown in Alabama *a k* | 14.30 | 5.00 | 4.84 | 21.12 | 53.39 | 1.35 | 5.8 | 5.7 | 24.6 | 62.3 | 1.6 | ....do | 927 |
| 928 | Cut 1879; grown in Indian Territory *a k* | 14.30 | 3.82 | 3.55 | 25.57 | 50.03 | 2.73 | 4.5 | 4.1 | 29.8 | 58.4 | 3.2 | ....do | 928 |
| | Sweet vernal grass (*Anthoxanthum odoratum*): | | | | | | | | | | | | | |
| 929 | Cut 1879, grown in New Hampshire *a k* | 14.30 | 7.22 | 7.34 | 22.10 | 46.12 | 2.92 | 8.4 | 8.6 | 25.8 | 53.8 | 3.4 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 126. | 929 |
| 930 | Cut May 11 to 24, 1880; grown in Pennsylvania. *a k* | 14.30 | 5.00 | 9.85 | 21.85 | 46.46 | 2.54 | 5.8 | 11.6 | 25.5 | 54.2 | 2.9 | ....do | 930 |
| | Tall oat grass, evergreen grass (*Arrhenatherum avenaceum*): | | | | | | | | | | | | | |
| 931 | Cut May 12, 1880; grown in North Carolina; late bloom. *a k* | 14.30 | 7.23 | 10.88 | 24.36 | 42.82 | 2.41 | 8.4 | 12.7 | 26.1 | 50.0 | 2.8 | U. S. Dept. Agr., Chem. Comp. Am. Grasess, 1884, p. 127. | 931 |
| 932 | Time of cutting unknown | 10.68 | 5.00 | 8.69 | 27.85 | 44.48 | 3.30 | 5.6 | 9.8 | 31.2 | 49.7 | 3.7 | Ark. Ex. Sta. Rep., 1888, p. 131 | 932 |
| | Bermuda grass (*Cynodon dactylon*): | | | | | | | | | | | | | |
| 933 | Cut 1878; grown in Alabama *a k* | 14.30 | 7.81 | 11.50 | 19.96 | 45.09 | 1.34 | 9.1 | 13.4 | 23.3 | 52.6 | 1.6 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127. | 933 |
| 934 | Cut 1878; grown in Mississippi *a k* | 14.30 | 8.49 | 9.16 | 20.16 | 46.06 | 1.83 | 9.9 | 10.7 | 23.5 | 53.8 | 2.1 | ....do | 934 |
| 935 | Time of cutting unknown | 10.36 | 8.60 | 8.73 | 21.64 | 48.46 | 2.19 | 9.6 | 9.8 | 24.1 | 54.1 | 2.4 | S. C. Ex. Sta. Rep., 1888, p. 123 | 935 |
| 936 | Do | 7.14 | 3.48 | 10.75 | 25.02 | 50.71 | 2.90 | 3.8 | 11.6 | 26.9 | 54.6 | 3.1 | Ga. Ex. Sta. Bul. 7, 1890 | 936 |
| | Orchard grass (*Dactylis glomerata*): | | | | | | | | | | | | | |
| 937 | Grown in New Hampshire *a k* | 14.30 | 7.23 | 7.21 | 21.35 | 46.92 | 2.99 | 8.4 | 8.4 | 24.9 | 54.8 | 3.5 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127. | 937 |
| 938 | Cut 1880; grown in Pennsylvania *a k* | 14.30 | 5.42 | 7.34 | 23.58 | 47.08 | 2.28 | 6.3 | 8.6 | 27.5 | 54.9 | 2.7 | ....do | 938 |
| 939 | Cut 1880; grown in North Carolina *a k* | 14.30 | 6.36 | 8.49 | 19.78 | 48.02 | 3.05 | 7.4 | 9.9 | 23.1 | 56.0 | 3.6 | ....do | 939 |
| 940 | Do. *a k* | 14.30 | 7.63 | 8.82 | 21.40 | 44.70 | 3.15 | 8.9 | 10.2 | 25.0 | 52.2 | 3.7 | ....do | 940 |
| 941 | Grown in Maine *a k* | 14.30 | 6.87 | 7.49 | 22.33 | 46.96 | 2.05 | 8.0 | 8.7 | 26.1 | 54.8 | 2.4 | ....do | 941 |
| 942 | Time of cutting unknown | 6.53 | 6.11 | 6.63 | 29.74 | 48.57 | 2.45 | 6.6 | 7.1 | 31.8 | 51.9 | 2.6 | N. J. Ex. Sta. Rep., 1886 p. 160 | 942 |
| 943 | Do | 7.32 | 5.48 | 6.88 | 30.70 | 47.95 | 1.67 | 5.9 | 7.4 | 33.2 | 51.7 | 1.8 | ....do | 943 |
| 944 | Cut about June 1, in bloom; grown on rich upland; affected by drouth; taken from stack. | 11.80 | 5.90 | 8.17 | 38.33 | 33.54 | 2.26 | 6.7 | 9.3 | 43.5 | 38.0 | 2.5 | Ky. Ex. Sta. Bul. 4, p. 22 | 944 |
| 945 | Cut June 7, in bloom; fertilized | 9.09 | 7.18 | 8.13 | 31.02 | 42.39 | 2.19 | 7.9 | 8.9 | 34.1 | 46.7 | 2.4 | Mass. State Ex. Sta. Rep., 1887, p. 125 | 945 |
| 946 | Cut June 7, in bloom; unfertilized | 9.16 | 7.88 | 10.21 | 31.02 | 39.55 | 2.18 | 8.7 | 11.2 | 34.1 | 43.6 | 2.4 | ....do | 946 |
| 947 | Cut June 30, in seed; fertilized | 8.38 | 5.65 | 6.94 | 32.51 | 43.26 | 3.26 | 6.2 | 7.6 | 35.5 | 47.2 | 3.5 | ....do | 947 |
| 948 | Cut June 30, in seed; unfertilized | 8.72 | 4.99 | 7.44 | 32.67 | 43.21 | 2.97 | 5.5 | 8.1 | 35.9 | 47.2 | 3.3 | ....do | 948 |
| 949 | Cut 7 to 10 days past bloom (digestion coefficients given). *a* | 10.95 | 6.25 | 7.50 | 33.02 | 39.25 | 3.03 | 7.0 | 8.4 | 37.1 | 44.1 | 3.4 | Me. Ex. Sta. Rep., 1888, p. 86 | 949 |
| 950 | Time of cutting unknown | 10.47 | 5.23 | 10.40 | 28.94 | 42.46 | 2.50 | 5.8 | 11.6 | 32.3 | 47.5 | 2.8 | Ark. Ex. Sta. Rep., 1888, p. 131 | 950 |
| 951 | Do | 13.64 | 5.63 | 8.31 | 36.18 | 32.92 | 3.32 | 6.5 | 9.6 | 41.9 | 38.2 | 3.8 | N. Y. State Ex. Sta. Rep., 1888, p. 237 | 951 |
| 952 | Do | 12.50 | 5.37 | 8.42 | 32.08 | 38.43 | 3.20 | 6.2 | 9.6 | 36.6 | 43.9 | 3.7 | ....do | 952 |
| 953 | Cut June 14, in full bloom *a h i j* | 26.20 | 7.27 | 7.42 | 24.25 | 31.41 | 3.45 | 9.9 | 10.0 | 32.8 | 42.6 | 4.7 | Ill. Ex. Sta. Bul. 5, 1889 | 953 |
| 954 | Do. *a h i j* | 28.21 | 6.75 | 7.85 | 24.04 | 29.68 | 3.47 | 9.5 | 10.9 | 33.5 | 41.3 | 4.8 | ....do | 954 |
| 955 | Do. *a h i j* | 24.81 | 6.66 | 7.90 | 27.49 | 29.75 | 3.39 | 8.8 | 10.5 | 36.6 | 39.6 | 4.5 | ....do | 955 |
| 956 | Cut June 21 and 22; seed in milk; heads green, tinged with purple. *a h i j* | 35.49 | 6.86 | 6.20 | 22.87 | 26.23 | 2.35 | 10.6 | 9.6 | 35.5 | 40.6 | 3.7 | ....do | 956 |

*Nos. 916, 917, 920.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **HAY AND OTHER DRIED COARSE FODDERS—Continued.** | | | | | | | | | | | | | |
| | HAY OF GRASSES—continued. | | | | | | | | | | | | | |
| | Orchard grass (*Dactylis glomerata*)—Cont'd. | % | % | % | % | % | % | % | % | % | % | % | | |
| 957 | Time of cutting unknown *a h i j* | 33.69 | 7.11 | 5.80 | 21.07 | 29.18 | 3.15 | 10.7 | 8.7 | 31.8 | 44.0 | 4.8 | Ill. Ex. Sta. Bul. 5, 1889 | 957 |
| 958 | Do. *a h i j* | 31.62 | 6.49 | 6.58 | 17.95 | 34.60 | 2.76 | 9.5 | 9.6 | 26.2 | 50.6 | 4.1 | do | 958 |
| | Analyses Nos. 942–952. Maximum | 13.64 | 7.88 | 10.40 | 38.33 | 48.57 | 3.32 | 8.7 | 11.6 | 43.5 | 51.9 | 3.8 | | |
| | Analyses Nos. 942–952. Minimum | 6.53 | 4.99 | 6.63 | 28.94 | 32.92 | 1.67 | 5.5 | 7.1 | 31.8 | 38.0 | 1.8 | | |
| | Analyses Nos. 942–952. Average | **9.87** | **5.97** | **8.09** | **32.39** | **41.05** | **2.63** | **6.7** | **9.0** | **36.0** | **45.4** | **2.9** | | |
| | Average composition, analyses Nos. 953–958. | **30.00** | **6.85** | **6.96** | **22.96** | **30.14** | **3.09** | **9.8** | **9.9** | **32.9** | **43.0** | **4.4** | | |
| | Spiked wild oat grass (*Danthonia spicata*): | | | | | | | | | | | | | |
| 959 | Cut 1879; grown in New Hampshire *a k* | 14.30 | 3.75 | 4.96 | 24.95 | 48.78 | 3.26 | 4.4 | 5.8 | 29.1 | 56.9 | 3.8 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127. | 959 |
| 960 | Cut in bloom *a* | 8.33 | 3.49 | 6.87 | 31.26 | 47.38 | 2.67 | 3.8 | 7.5 | 34.1 | 51.7 | 2.9 | Me. Ex. Sta. Rep., 1888, p. 86 | 960 |
| | Blue joint finger grass (*Deyeuxia canadensis*): | | | | | | | | | | | | | |
| 961 | Cut July 13; very rank in a rich swale | 6.87 | 5.49 | 11.19 | 37.18 | 35.82 | 3.45 | 5.9 | 12.0 | 39.9 | 38.5 | 3.7 | Me. Ex. Sta. Rep., 1885–'86, p. 51 | 961 |
| 962 | Cut first week in August; contained some rushes, sedges, etc. | 5.90 | 5.85 | 6.86 | 27.21 | 51.79 | 2.39 | 6.2 | 7.3 | 28.9 | 55.1 | 2.5 | Mass. State Ex. Sta. Rep., 1885, p. 97 | 962 |
| 963 | Time of cutting unknown | 8.62 | 5.46 | 9.19 | 33.10 | 40.81 | 2.82 | 6.0 | 10.1 | 36.2 | 44.6 | 3.1 | Me. Ex. Sta. Bul. 26, 1888 | 963 |
| | Crab grass, finger grass (*Panicum sanguinale*): | | | | | | | | | | | | | |
| 964 | Cut 1878, grown in Alabama *a k* | 14.30 | 10.81 | 8.38 | 27.50 | 36.59 | 2.42 | 12.6 | 9.8 | 32.1 | 42.7 | 2.8 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 125. | 964 |
| 965 | Cut Aug. 11, 1880; grown in Pennsylvania *a k* | 14.30 | 9.81 | 10.14 | 19.63 | 43.33 | 2.79 | 11.5 | 11.8 | 22.9 | 50.5 | 3.3 | do | 965 |
| | Yard grass, crowfoot, crab grass, wire grass (*Eleusine indica*): | | | | | | | | | | | | | |
| 966 | Grown in Texas *a k* | 14.30 | 10.49 | 11.65 | 26.58 | 29.15 | 1.83 | 19.2 | 13.7 | 31.0 | 34.0 | 2.1 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127. | 966 |
| 967 | Cut in 1878; grown in Georgia *a k* | 14.30 | 7.06 | 10.39 | 19.27 | 47.20 | 1.78 | 8.2 | 12.1 | 22.5 | 55.1 | 2.1 | do | 967 |
| 968 | Cut in 1878; grown in Alabama *a k* | 14.30 | 8.32 | 9.48 | 18.19 | 47.54 | 2.17 | 9.7 | 11.1 | 21.2 | 55.5 | 2.5 | do | 968 |
| | Meadow fescue (*Festuca pratensis*): | | | | | | | | | | | | | |
| 969 | Grown in New Hampshire *a k* | 14.30 | 7.83 | 9.21 | 20.78 | 45.07 | 2.81 | 9.1 | 10.7 | 24.3 | 52.6 | 3.3 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 128. | 969 |
| 970 | Cut June 1; grown in District of Columbia. *a k* | 14.30 | 6.14 | 6.74 | 23.68 | 43.31 | 2.83 | 7.1 | 11.4 | 27.6 | 50.6 | 3.3 | do | 970 |
| 971 | Cut June 2; grown in Pennsylvania *a k* | 14.30 | 6.91 | 11.80 | 19.29 | 44.22 | 3.48 | 8.1 | 13.7 | 22.5 | 51.6 | 4.1 | do | 971 |
| 972 | Cut June 28, in seed; fertilized | 7.40 | 6.65 | 6.50 | 31.90 | 45.54 | 2.01 | 7.2 | 7.0 | 34.5 | 49.2 | 2.1 | Mass. State Ex. Sta. Rep., 1887, p. 126 | 972 |
| 973 | Cut June 28, in seed; unfertilized | 8.03 | 7.52 | 6.69 | 31.83 | 44.29 | 1.64 | 8.2 | 7.3 | 34.6 | 48.1 | 1.8 | do | 973 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 974 | Cut June 14; one half in bloom, one half in milk. *a* | 29.50 | 6.59 | 5.54 | 27.02 | 28.50 | 2.85 | 9.3 | 7.9 | 38.3 | 40.5 | 4.0 | Ill. Ex. Sta. Bul. 5, 1889 | 974 |
| 975 | Do | 28.18 | 5.49 | 5.97 | 23.54 | 33.70 | 3.12 | 7.6 | 8.3 | 32.8 | 46.9 | 4.4 | do | 975 |
| 976 | Cut June 21; seeds milk to dough, spikelets yellow. *a h i j* | 31.73 | 6.79 | 4.48 | 22.71 | 31.52 | 2.77 | 9.9 | 6.6 | 33.2 | 46.2 | 4.1 | do | 976 |
| 977 | Time of cutting unknown *a h i j* | 32.53 | 7.69 | 5.91 | 21.30 | 29.64 | 2.93 | 11.4 | 8.8 | 31.5 | 44.0 | 4.3 | do | 977 |
| | Nerved meadow grass, nerved manna grass (*Glyceria nervata*): | | | | | | | | | | | | | |
| 978 | Cut 1879, grown in Vermont *a k* | 14.30 | 5.30 | 8.06 | 24.17 | 45.43 | 2.74 | 6.2 | 9.4 | 28.2 | 53.0 | 3.2 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127. | 978 |
| 979 | Cut 1979, grown in New Hampshire *a k* | 14.30 | 5.83 | 7.12 | 18.83 | 51.43 | 2.49 | 6.8 | 8.3 | 22.0 | 60.0 | 2.9 | do | 979 |
| 980 | Cut June 2, 1880; grown in Pennsylvania *a k* | 14.30 | 6.79 | 12.70 | 18.32 | 45.43 | 2.46 | 7.9 | 14.8 | 21.4 | 53.0 | 2.9 | do | 980 |
| | Italian rye grass (*Lolium italicum*): | | | | | | | | | | | | | |
| 981 | In bloom; fertilized *c* | 9.30 | 6.74 | 8.84 | 28.36 | 44.91 | 1.85 | 7.4 | 9.8 | 31.3 | 49.5 | 2.0 | Mass. State Ex. Sta. Rep., 1889, p. 162 | 981 |
| 982 | In bloom; unfertilized *c* | 8.96 | 6.83 | 6.49 | 29.85 | 46.60 | 1.27 | 7.5 | 7.1 | 32.8 | 51.2 | 1.4 | do | 982 |
| 983 | In seed; fertilized *c* | 8.22 | 7.87 | 8.75 | 33.87 | 39.55 | 1.74 | 8.6 | 9.5 | 36.9 | 43.1 | 1.9 | do | 983 |
| 984 | In seed; unfertilized *c* | 7.38 | 6.07 | 5.74 | 29.99 | 48.90 | 1.92 | 6.6 | 6.2 | 32.4 | 52.8 | 2.0 | do | 984 |
| | Drop seed, nimble Will, wire grass (*Muhlenbergia diffusa*): | | | | | | | | | | | | | |
| 985 | Cut in 1878; grown in Texas *a k* | 14.30 | 7.95 | 8.57 | 20.19 | 47.44 | 1.55 | 9.3 | 10.0 | 23.5 | 55.4 | 1.8 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 126. | 985 |
| 986 | Cut Aug. 25, 1880; grown in Pennsylvania *a k* | 14.30 | 14.06 | 9.32 | 8.80 | 40.58 | 2.94 | 16.4 | 10.9 | 21.9 | 47.4 | 3.4 | do | 986 |
| | Two-edged panic (*Panicum anceps*): | | | | | | | | | | | | | |
| 987 | Grown in Alabama *a k* | 14.30 | 7.76 | 4.95 | 23.89 | 47.56 | 1.57 | 9.1 | 5.8 | 27.8 | 55.5 | 1.8 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 125. | 987 |
| 988 | Cut July 31, 1880; grown in Pennsylvania *a k* | 14.30 | 4.87 | 7.74 | 17.89 | 53.64 | 1.56 | 5.7 | 9.0 | 20.9 | 62.6 | 1.8 | do | 988 |
| | Barnyard grass (*Panicum crus galli*): | | | | | | | | | | | | | |
| 989 | Grown in Alabama *a k* | 14.30 | 5.98 | 6.66 | 24.78 | 46.44 | 1.84 | 7.0 | 7.8 | 28.9 | 54.2 | 2.1 | do | 989 |
| 990 | Grown in Texas *a k* | 14.30 | 13.77 | 3.42 | 26.68 | 40.08 | 1.75 | 16.1 | 4.0 | 31.1 | 46.8 | 2.0 | do | 990 |
| 991 | Cut Aug. 25, 1880; grown in Pennsylvania *a k* | 14.30 | 10.13 | 10.80 | 21.69 | 40.95 | 2.13 | 11.8 | 12.6 | 25.3 | 47.8 | 2.5 | do | 991 |
| | Tall panic, switch grass (*Panicum virgatum*): | | | | | | | | | | | | | |
| 992 | Cut in 1879; grown in Indian Territory, low growth *a k* | 14.30 | 4.70 | 4.39 | 24.95 | 48.81 | 2.85 | 5.5 | 5.1 | 29.1 | 57.0 | 3.3 | do | 992 |
| 993 | Cut in 1879; grown in Indian Territory, tall growth *a k* | 14.30 | 3.92 | 2.40 | 27.64 | 49.19 | 2.55 | 4.6 | 2.8 | 32.2 | 57.4 | 3.0 | do | 993 |
| 994 | Cut in 1878; grown in Alabama *a k* | 14.30 | 3.20 | 3.92 | 24.70 | 52.23 | 1.65 | 3.7 | 4.6 | 28.9 | 60.9 | 1.9 | do | 994 |
| 995 | Cut in 1878; grown in Texas *a k* | 14.30 | 6.20 | 4.23 | 31.52 | 42.33 | 1.42 | 7.2 | 4.9 | 36.8 | 49.4 | 1.7 | do | 995 |
| | Smooth paspalum (*Paspalum laeve*): | | | | | | | | | | | | | |
| 996 | Cut in 1878; grown in Texas *a k* | 14.30 | 6.60 | 6.95 | 23.66 | 46.13 | 2.36 | 7.7 | 8.1 | 27.6 | 53.8 | 2.8 | do | 996 |
| 997 | Cut Aug. 23 to 29, 1880; grown in Pennsylvania *a k* | 14.30 | 5.91 | 7.00 | 20.14 | 50.80 | 1.85 | 6.9 | 8.1 | 23.5 | 59.3 | 2.2 | do | 997 |
| | Pearl millet (*Penicillaria spicata*): | | | | | | | | | | | | | |
| 998 | Cut Sept. 10; unfertilized | 8.10 | 6.51 | 7.45 | 31.52 | 45.60 | 0.82 | 7.1 | 8.1 | 34.3 | 49.6 | 0.9 | Mass. State Ex. Sta. Rep., 1885, p. 56 | 998 |
| 999 | Cut Sept. 10; fertilized | 7.80 | 6.18 | 7.28 | 31.63 | 45.73 | 1.38 | 6.7 | 7.9 | 34.3 | 49.6 | 1.5 | Mass. State Ex. Sta. Rep., 1885, p. 55 | 999 |
| | Timothy, herd's grass (of New England and New York) (*Phleum pratense*): | | | | | | | | | | | | | |
| 1000 | Cut June 23, 1879; grown in Connecticut *k* | 14.30 | 3.27 | 4.88 | 32.81 | 43.29 | 1.45 | 3.8 | 5.7 | 38.2 | 50.5 | 1.8 | Conn. State Ex. Sta. Rep., 1879, p. 79 | 1000 |
| 1001 | Cut July 1, 1878; grown in New Hampshire *k* | 14.30 | 4.10 | 6.20 | 25.30 | 48.10 | 2.00 | 4.8 | 7.2 | 29.5 | 56.2 | 2.3 | do | 1001 |
| 1002 | Cut July 11, 1878; grown in New Hampshire *k* | 14.30 | 3.80 | 5.30 | 27.50 | 47.20 | 1.90 | 4.4 | 6.2 | 32.1 | 55.1 | 2.2 | do | 1002 |
| 1003 | Cut July 20 to 25, 1877; grown in Connecticut *k* | 14.30 | 4.38 | 5.57 | 29.48 | 45.19 | 1.08 | 5.1 | 6.5 | 34.3 | 52.8 | 1.3 | do | 1003 |
| 1004 | Cut July 21 to 28, 1877; grown in Connecticut *k* | 14.30 | 4.60 | 6.90 | 26.80 | 45.40 | 2.00 | 5.4 | 8.0 | 31.3 | 53.0 | 2.3 | do | 1004 |

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **HAY AND OTHER DRIED COARSE FODDERS—Continued.** | | | | | | | | | | | | | |
| | HAY OF GRASSES—continued. | | | | | | | | | | | | | |
| | **Timothy, herd's grass (of New England and New York) (*Phleum pratense*)—Cont'd.** | % | % | % | % | % | % | % | % | % | % | % | | |
| 1005 | Time of cutting unknown | 8.90 | 4.64 | 5.31 | 29.60 | 48.58 | 2.97 | 5.1 | 5.8 | 32.5 | 53.3 | 3.3 | N. J. Ex. Sta. Rep., 1880, p. 46 | 1005 |
| 1006 | Do | 13.47 | 3.86 | 7.63 | 29.26 | 43.48 | 2.30 | 4.5 | 8.8 | 33.8 | 50.2 | 2.7 | Conn. State Ex. Sta. Rep., 1881, p. 87 | 1006 |
| 1007 | Cut in full bloom; grown in Maine | 10.70 | 3.80 | 6.00 | 27.70 | 48.50 | 3.30 | 4.3 | 6.7 | 31.0 | 54.3 | 3.7 | Agr. of Me., 1882, p. 297 | 1007 |
| 1008 | Cut past bloom; grown in Maine | 7.80 | 3.60 | 4.60 | 30.20 | 51.00 | 2.80 | 3.9 | 5.0 | 32.7 | 55.4 | 3.0 | Agr. of Me., 1882, p. 298 | 1008 |
| 1009 | Time of cutting unknown | 11.96 | 4.28 | 6.44 | 34.25 | 41.09 | 1.98 | 4.9 | 7.3 | 39.1 | 46.4 | 2.3 | N. J. Ex. Sta. Rep., 1882, p. 71 | 1009 |
| 1010 | Cut after bloom | 8.70 | 3.69 | 6.62 | 33.41 | 45.65 | 1.93 | 4.0 | 7.2 | 36.6 | 50.1 | 2.1 | Mass. State Ex. Sta. Rep., 1883, p. 80 | 1010 |
| 1011 | Cut in full bloom; grown in Maine | 12.20 | 4.95 | 6.25 | 26.81 | 46.99 | 2.80 | 5.7 | 7.2 | 30.4 | 53.5 | 3.2 | Agr. of Me., 1883, p. 432 | 1011 |
| 1012 | Cut out of bloom; grown in Maine | 12.40 | 4.02 | 5.00 | 26.83 | 49.25 | 2.50 | 4.6 | 5.7 | 30.6 | 56.2 | 2.9 | ....do | 1012 |
| 1013 | Cut 1881, in bloom (eastern farm); weight,* 3,634; weight of dry hay, 2,307. | 9.53 | 4.55 | 7.29 | 33.36 | 43.04 | 2.23 | 5.0 | 8.1 | 36.9 | 47.5 | 2.5 | Pa. State Col. Bul. 5, 1883, p. 41 | 1013 |
| 1014 | Cut 1881, nearly ripe (eastern farm); weight,* 4,234; weight of dry hay, 3,390. | 9.46 | 3.33 | 5.14 | 32.35 | 47.57 | 2.15 | 3.7 | 5.7 | 35.7 | 52.5 | 2.4 | ....do | 1014 |
| 1015 | Cut 1882, in bloom (eastern farm); weight,* 3,634; weight of dry hay, 2,556. | 8.96 | 2.50 | 5.79 | 36.10 | 44.51 | 2.14 | 2.8 | 6.4 | 39.6 | 48.9 | 2.3 | ....do | 1015 |
| 1016 | Cut 1882, nearly ripe (eastern farm); weight,* 3,802; weight of dry hay, 3,168. | 8.88 | 2.79 | 5.31 | 32.71 | 47.71 | 2.60 | 3.1 | 5.8 | 35.9 | 52.4 | 2.8 | ....do | 1016 |
| 1017 | Cut 1881, in bloom (central farm); weight,* 5,000; weight of dry hay, 3,922. | 10.27 | 4.31 | 5.23 | 33.84 | 44.32 | 2.03 | 4.8 | 5.8 | 37.7 | 49.4 | 2.3 | ....do | 1017 |
| 1018 | Cut 1881, nearly ripe (central farm); weight,* 5,270; weight of dry hay, 4,035. | 10.06 | 3.67 | 4.27 | 32.02 | 48.03 | 2.01 | 4.1 | 4.7 | 35.6 | 53.4 | 2.2 | ....do | 1018 |
| 1019 | Cut 1882, in bloom (central farm); weight,* 3,570; weight of dry hay, 3,037. | 7.00 | 3.40 | 5.39 | 37.11 | 44.86 | 2.24 | 3.7 | 5.8 | 39.9 | 48.2 | 2.4 | ....do | 1019 |
| 1020 | Cut 1882, nearly ripe (central farm); weight,* 4,017; weight in dry hay, 3,413. | 7.00 | 3.30 | 4.88 | 33.39 | 49.09 | 2.34 | 3.6 | 5.3 | 35.9 | 52.7 | 2.5 | ....do | 1020 |
| 1021 | Just out of bloom | 10.55 | 4.19 | 8.07 | 26.13 | 48.69 | 2.37 | 4.7 | 9.0 | 29.2 | 54.4 | 2.7 | Mass. Ex. Sta. Rep., 1884, p. 58 | 1021 |
| 1022 | Time of cutting unknown | 6.50 | 3.00 | 5.06 | 24.34 | 58.52 | 2.58 | 3.2 | 5.4 | 26.0 | 62.6 | 2.8 | Mo. State Agr. Col. Farm Bul. 11, 1884, p. 5. | 1022 |
| 1023 | Cut June 20, 1880; grown in Pennsylvania *a k* | 14.30 | 4.33 | 7.82 | 21.72 | 49.06 | 2.77 | 5.1 | 9.1 | 25.4 | 57.2 | 3.2 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 126. | 1023 |
| 1024 | Cut 1881; grown in New Hampshire *a k* | 14.30 | 3.92 | 4.96 | 24.23 | 48.99 | 3.60 | 4.6 | 5.7 | 28.3 | 57.2 | 4.2 | ....do | 1024 |
| 1025 | Cut 1882; grown in Indiana *a k* | 14.30 | 6.04 | 4.73 | 27.65 | 45.41 | 1.87 | 7.1 | 5.5 | 32.2 | 53.0 | 2.2 | ....do | 1025 |
| 1026 | Grown in Massachusetts | 8.30 | 5.61 | 8.95 | 27.68 | 47.12 | 2.34 | 6.1 | 9.7 | 30.2 | 51.4 | 2.6 | Mass. Ex. Sta. Rep., 1885, p. 80 | 1026 |
| 1027 | Cut 1884; sample taken 1885; grown in Maine. | 10.95 | 4.00 | 7.00 | 30.60 | 45.10 | 2.35 | 4.5 | 7.9 | 34.3 | 50.7 | 2.6 | Me. Ex. Sta. Rep. 1885–'86, p. 51 | 1027 |
| 1028 | Cut 1885, in bloom; sample taken from field; grown in Maine. | 7.05 | 6.02 | 7.13 | 35.80 | 40.59 | 3.41 | 6.5 | 7.7 | 38.5 | 43.6 | 3.7 | ....do | 1028 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1029 | Cut two weeks after bloom; grown in Maine. | 11.34 | 3.75 | 5.94 | 28.89 | 47.41 | 2.67 | 4.2 | 6.7 | 32.6 | 53.5 | 3.0 | Me. Ex. Sta. Rep., 1886–'87, p. 68 | 1029 |
| 1030 | Do | 9.35 | 3.48 | 5.19 | 28.60 | 50.51 | 2.87 | 3.8 | 5.7 | 31.6 | 55.7 | 3.2 | do | 1030 |
| 1031 | Taken from stack; not well cured; bleached by rains; cut when very ripe; seeds mostly shelled out; coarse and woody. | 12.27 | 3.03 | 4.24 | 33.58 | 45.46 | 1.42 | 3.5 | 4.8 | 38.3 | 51.8 | 1.6 | Ky. Ex. Sta. Bul. 5, 1886, p. 15 | 1031 |
| 1032 | Taken from stack; cut when nearly ripe; grown on bottom land, black soil; affected by drouth. | 8.05 | 5.10 | 6.03 | 29.97 | 48.78 | 2.07 | 5.5 | 6.6 | 32.6 | 53.1 | 2.2 | do | 1032 |
| 1033 | Taken from stack; cut at ripening of seeds; grown on black soil; coarse and woody. | 9.17 | 4.33 | 4.86 | 32.33 | 47.82 | 1.49 | 4.8 | 5.4 | 33.6 | 52.6 | 1.6 | do | 1033 |
| 1034 | Cut in ripening stage; grown in Blue-Grass Region; not as good as usual. | 13.97 | 2.68 | 4.73 | 38.46 | 39.19 | 0.97 | 3.1 | 5.5 | 44.7 | 45.6 | 1.1 | do | 1034 |
| 1035 | Do | 15.54 | 3.70 | 4.80 | 35.89 | 38.45 | 1.62 | 4.4 | 5.7 | 42.5 | 45.5 | 1.9 | do | 1035 |
| 1036 | Grown in New Jersey *b* | 8.67 | 4.20 | 9.19 | 30.30 | 46.02 | 1.62 | 4.6 | 10.1 | 33.2 | 50.3 | 1.8 | N. J. Ex. Sta. Rep., 1886, p. 158 | 1036 |
| 1037 | Do.*b* | 7.43 | 3.43 | 6.63 | 28.27 | 51.92 | 2.32 | 3.7 | 7.1 | 30.5 | 56.2 | 2.5 | do | 1037 |
| 1038 | Do.*b* | 6.47 | 3.77 | 6.50 | 24.55 | 56.73 | 1.98 | 4.0 | 6.9 | 26.3 | 60.7 | 2.1 | do | 1038 |
| 1039 | Do.*b* | 6.99 | 4.68 | 6.63 | 28.37 | 51.51 | 1.82 | 5.1 | 7.1 | 30.5 | 55.4 | 1.9 | do | 1039 |
| 1040 | Do.*b* | 7.43 | 4.85 | 6.19 | 29.25 | 50.45 | 1.83 | 5.3 | 6.7 | 31.6 | 54.5 | 1.9 | do | 1040 |
| 1041 | Do.*b* | 7.25 | 3.64 | 5.13 | 30.98 | 51.26 | 1.74 | 3.9 | 5.5 | 33.4 | 55.4 | 1.8 | do | 1041 |
| 1042 | Do.*b* | 7.50 | 4.93 | 7.31 | 27.63 | 50.86 | 1.77 | 5.3 | 7.8 | 29.9 | 55.0 | 2.0 | do | 1042 |
| 1043 | Do.*b* | 7.40 | 5.38 | 6.50 | 31.28 | 47.92 | 1.52 | 5.8 | 7.0 | 33.8 | 51.8 | 1.6 | do | 1043 |
| 1044 | Do.*b* | 6.12 | 3.56 | 3.75 | 27.71 | 57.08 | 1.78 | 3.8 | 4.0 | 29.5 | 60.7 | 2.0 | do | 1044 |
| 1045 | Do.*b* | 6.57 | 4.77 | 4.69 | 28.95 | 53.10 | 1.92 | 5.1 | 5.0 | 31.0 | 56.8 | 2.1 | do | 1045 |
| 1046 | Grown in Vermont | 6.65 | 5.28 | 9.69 | 31.61 | 43.00 | 3.77 | 5.6 | 10.4 | 33.9 | 46.1 | 4.0 | Vt. Ex. Sta. Rep., 1887, p. 122 | 1046 |
| 1047 | Grown in Missouri | 7.20 | 5.54 | 7.19 | 29.35 | 47.88 | 2.84 | 5.9 | 7.7 | 31.7 | 51.7 | 3.0 | Mo. State Agr. Col. Farm Bul. 27, 1887, p. 6. | 1047 |
| 1048 | In full bloom *a* | 8.32 | 4.20 | 7.50 | 29.94 | 46.74 | 3.30 | 4.6 | 8.2 | 32.7 | 50.9 | 3.6 | Me. Ex. Sta. Rep., 1888, p. 86 | 1048 |
| 1049 | Past bloom *a* | 12.60 | 4.52 | 6.85 | 28.05 | 44.84 | 3.14 | 5.2 | 7.8 | 32.1 | 51.3 | 3.6 | do | 1049 |
| 1050 | Time of cutting unknown | 10.78 | 6.34 | 7.81 | 31.72 | 41.00 | 2.35 | 7.1 | 8.7 | 35.6 | 46.0 | 2.6 | Mass. State Ex. Sta. Rep., 1888, p. 36 | 1050 |
| 1051 | Do | 15.10 | 4.32 | 7.95 | 26.50 | 44.13 | 2.00 | 5.1 | 9.4 | 31.2 | 51.9 | 2.4 | Ark. Ex. Sta. Rep., 1888, p. 133 | 1051 |
| 1052 | Cut June 25; in full bloom 2 days *a* | 23.61 | 5.34 | 5.35 | 23.76 | 38.07 | 3.87 | 7.0 | 7.0 | 31.1 | 49.8 | 5.1 | Ill. Ex. Sta. Bul. 5, 1889 | 1052 |
| 1053 | Do.*a* | 25.58 | 5.09 | 5.53 | 24.08 | 36.30 | 3.42 | 6.8 | 7.4 | 32.4 | 48.8 | 4.6 | do | 1053 |
| 1054 | Do.*a* | 28.03 | 4.43 | 5.04 | 24.42 | 34.65 | 3.43 | 6.1 | 7.0 | 33.9 | 48.2 | 4.8 | do | 1054 |
| 1055 | Do.*a* | 28.88 | 5.17 | 5.50 | 22.20 | 34.27 | 3.98 | 7.3 | 7.9 | 31.1 | 48.2 | 5.5 | do | 1055 |
| | Average *h i j* | 26.53 | 5.01 | 5.39 | 23.60 | 35.79 | 3.68 | 6.8 | 7.3 | 32.1 | 48.8 | 5.0 | | |
| 1056 | Cut July 2; pollen shed; half the anthers fallen *a*. | 20.86 | 5.37 | 5.09 | 27.91 | 37.14 | 3.63 | 6.8 | 6.6 | 35.2 | 46.8 | 4.6 | do | 1056 |
| 1057 | Do.*a* | 21.59 | 5.09 | 5.49 | 27.50 | 36.97 | 3.36 | 6.5 | 7.0 | 35.1 | 47.1 | 4.3 | do | 1057 |
| 1058 | Do.*a* | 20.03 | 5.43 | 5.25 | 25.85 | 39.94 | 3.50 | 6.8 | 6.6 | 32.3 | 50.0 | 4.3 | do | 1058 |
| 1059 | Do.*a* | 20.53 | 5.20 | 4.87 | 25.73 | 40.03 | 3.64 | 6.5 | 6.1 | 32.4 | 50.4 | 4.6 | do | 1059 |
| | Average *h i j* | 20.75 | 5.27 | 5.20 | 26.76 | 38.48 | 3.54 | 6.6 | 6.6 | 33.7 | 48.6 | 4.5 | | |
| 1060 | Cut July 11; lower leaves partly brown; seed in dough. *a* | 23.32 | 4.71 | 4.03 | 25.82 | 39.47 | 2.65 | 6.1 | 5.3 | 33.7 | 51.5 | 3.4 | do | 1060 |
| 1061 | Do.*a* | 23.90 | 6.23 | 4.99 | 25.19 | 36.53 | 3.16 | 8.2 | 6.6 | 33.1 | 48.0 | 4.1 | do | 1061 |
| 1062 | Do.*a* | 23.17 | 4.48 | 4.70 | 25.71 | 38.81 | 3.13 | 5.8 | 6.1 | 33.5 | 50.5 | 4.1 | do | 1062 |

* When put in barn, pounds per acre.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **HAY AND OTHER DRIED COARSE FODDERS—Continued.** | | | | | | | | | | | | | |
| | HAY OF GRASSES—continued. | | | | | | | | | | | | | |
| | Timothy, herd's grass (of New England and New York) (*Phleum pratense*)—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 1063 | Cut July 11; lower leaves partly brown; seed in dough. *a* | 23.24 | 5.21 | 5.04 | 28.84 | 34.90 | 2.77 | 6.8 | 6.6 | 37.5 | 45.5 | 3.6 | Ill. Ex. Sta. Bul. 5, 1889 | 1063 |
| | Average *h i j* | **23.41** | **5.16** | **4.69** | **26.39** | **37.43** | **2.92** | **6.7** | **6.1** | **34.5** | **48.9** | **3.8** | | |
| 1064 | Cut July 23; more than half the seed ripe; quarter of the leaves brown. *a* | 22.72 | 4.78 | 4.71 | 24.80 | 40.39 | 2.60 | 6.2 | 6.1 | 32.1 | 52.2 | 3.4 | do | 1064 |
| 1065 | Do. *a* | 22.48 | 4.41 | 4.74 | 26.50 | 39.27 | 2.60 | 5.7 | 6.1 | 34.2 | 50.6 | 3.4 | do | 1065 |
| 1066 | Do. *a* | 22.72 | 4.50 | 5.07 | 26.97 | 37.98 | 2.77 | 5.8 | 6.6 | 34.9 | 44.1 | 3.6 | do | 1066 |
| 1067 | Do. *a* | 18.63 | 4.78 | 4.98 | 27.75 | 41.25 | 2.61 | 5.9 | 6.1 | 34.1 | 50.7 | 3.2 | do | 1067 |
| | Average *h i j* | **21.64** | **4.60** | **4.88** | **26.52** | **39.71** | **2.65** | **5.9** | **6.2** | **33.8** | **50.7** | **3.4** | | |
| | All analyses of timothy. Maximum | 28.88 | 6.34 | 9.69 | 38.46 | 58.52 | 3.98 | 8.2 | 10.4 | 44.7 | 62.6 | 5.5 | | |
| | All analyses of timothy. Minimum | 6.12 | 2.50 | 3.75 | 22.20 | 34.27 | 0.97 | 2.8 | 4.0 | 25.4 | 43.7 | 1.1 | | |
| | All analyses of timothy. Average | **13.18** | **4.37** | **5.87** | **29.03** | **45.08** | **2.47** | **5.1** | **6.8** | **33.5** | **51.7** | **2.9** | | |
| | Twelve analyses, cut in full bloom.* Maximum | 28.88 | 6.02 | 7.50 | 37.11 | 48.50 | 3.98 | 7.3 | 9.4 | 39.9 | 54.3 | 5.5 | | |
| | Twelve analyses, cut in full bloom.* Minimum | 7.00 | 2.50 | 5.04 | 22.20 | 34.27 | 2.03 | 2.8 | 5.8 | 31.0 | 43.9 | 2.3 | | |
| | Twelve analyses, cut in full bloom.* Average | **15.01** | **4.48** | **6.01** | **29.59** | **41.90** | **3.01** | **5.3** | **7.1** | **34.7** | **49.4** | **3.5** | | |
| | Eleven analyses, cut soon after bloom.† Maximum | 21.59 | 5.37 | 8.07 | 33.41 | 51.00 | 3.64 | 6.8 | 9.0 | 36.6 | 56.2 | 4.6 | | |
| | Eleven analyses, cut soon after bloom.† Minimum | 7.80 | 3.48 | 4.60 | 25.73 | 36.97 | 1.93 | 3.8 | 5.0 | 29.2 | 46.8 | 2.1 | | |
| | Eleven analyses, cut soon after bloom.† Average | **14.16** | **4.39** | **5.73** | **28.10** | **44.67** | **2.95** | **5.1** | **6.6** | **32.7** | **52.1** | **3.5** | | |
| | Twelve analyses, cut when nearly ripe.‡ Maximum | 22.72 | 5.10 | 6.03 | 38.46 | 49.09 | 2.77 | 8.2 | 6.6 | 44.7 | 53.4 | 3.8 | | |
| | Twelve analyses, cut when nearly ripe.‡ Minimum | 7.00 | 2.68 | 4.27 | 24.80 | 37.98 | 0.97 | 3.1 | 4.7 | 32.1 | 44.1 | 1.1 | | |
| | Twelve analyses, cut when nearly ripe.‡ Average | **14.05** | **3.94** | **4.96** | **31.10** | **43.80** | **2.15** | **4.5** | **5.8** | **36.2** | **50.9** | **2.6** | | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | English blue grass, wire grass (*Poa compressa*): | | | | | | | | | | | | | |
| 1068 | Cut in 1879; grown in New Hampshire *a k* | 14.30 | 4.46 | 7.56 | 21.73 | 49.00 | 2.95 | 5.2 | 8.8 | 25.4 | 57.2 | 3.4 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127. | 1068 |
| 1069 | Cut June 10, 1880; grown in Pennsylvania *a k* | 14.30 | 6.73 | 7.66 | 17.91 | 50.11 | 3.29 | 7.9 | 8.9 | 20.9 | 58.5 | 3.8 | do | 1069 |
| 1070 | Cut June 6, 1880; grown in Delaware *a k* | 14.30 | 5.60 | 11.53 | 17.27 | 47.66 | 3.64 | 6.5 | 13.5 | 20.1 | 55.6 | 4.3 | do | 1070 |
| | Kentucky blue grass, June grass (*Poa pratensis*): | | | | | | | | | | | | | |
| 1071 | Grown in Wisconsin *a k* | 14.30 | 4.46 | 9.89 | 23.94 | 44.96 | 2.45 | 5.2 | 11.5 | 27.9 | 52.5 | 2.9 | do | 1071 |
| 1072 | Grown in New Hampshire *a k* | 14.30 | 4.69 | 6.43 | 19.26 | 51.08 | 4.24 | 5.5 | 7.4 | 22.5 | 59.6 | 5.0 | do | 1072 |
| 1073 | Cut May 17; grown in Illinois *a k* | 14.30 | 6.70 | 12.94 | 21.36 | 41.47 | 3.23 | 7.8 | 15.1 | 24.9 | 48.4 | 3.8 | do | 1073 |
| 1074 | Cut June 16; grown in North Carolina *a k* | 14.30 | 7.72 | 12.48 | 20.68 | 41.09 | 3.73 | 9.0 | 14.6 | 24.1 | 47.9 | 4.4 | do | 1074 |
| 1075 | Cut May 26; grown in Pennsylvania *a k* | 14.30 | 6.41 | 12.19 | 17.69 | 45.48 | 3.93 | 7.5 | 14.2 | 20.6 | 53.1 | 4.6 | do | 1075 |
| 1076 | Cut two weeks after ripening; taken from stack; not well cured; stems hard and woody. | 16.09 | 4.69 | 7.07 | 26.76 | 43.37 | 2.02 | 5.6 | 8.4 | 31.9 | 51.7 | 2.4 | Ky. Ex. Sta. Bul. 5, 1886, p. 23 | 1076 |
| 1077 | Cut June 14; seeds in milk *a* | 22.46 | 7.36 | 6.44 | 24.90 | 35.38 | 3.50 | 9.5 | 8.3 | 32.1 | 45.7 | 4.4 | Ill. Ex. Sta. Bul. 5, 1889 | 1077 |
| 1078 | Do.*a* | 23.43 | 7.58 | 6.03 | 24.54 | 34.91 | 3.51 | 9.9 | 7.9 | 32.0 | 45.6 | 4.6 | do | 1078 |
| 1079 | Do.*a* | 26.47 | 5.77 | 6.11 | 23.88 | 33.70 | 4.07 | 7.8 | 8.3 | 32.5 | 45.9 | 5.5 | do | 1079 |
| 1080 | Do.*a* | 25.07 | 7.25 | 6.63 | 24.47 | 33.18 | 3.40 | 9.8 | 8.9 | 32.6 | 44.2 | 4.5 | do | 1080 |
| 1081 | Cut June 21, 22; heads yellow; seeds ripe *a* | 23.69 | 7.76 | 6.00 | 25.73 | 33.67 | 3.15 | 10.2 | 7.9 | 33.7 | 44.1 | 4.1 | do | 1081 |
| 1082 | Do.*a* | 25.36 | 7.10 | 6.53 | 24.45 | 33.21 | 3.35 | 9.6 | 8.7 | 32.8 | 44.4 | 4.5 | do | 1082 |
| 1083 | Do.*a* | 32.82 | 5.06 | 5.29 | 20.44 | 33.56 | 2.83 | 7.5 | 7.9 | 30.4 | 50.0 | 4.2 | do | 1083 |
| 1084 | Do.*a* | 29.32 | 5.72 | 5.55 | 24.86 | 31.79 | 2.76 | 8.1 | 7.9 | 35.2 | 44.9 | 3.9 | do | 1084 |
| 1085 | Summer pasture (aftermath), from July 20 to Sept. 10; average composition. *a* | 47.05 | 4.50 | 8.23 | 15.39 | 22.34 | 2.49 | 8.5 | 15.5 | 29.0 | 42.3 | 4.7 | do | 1085 |
| 1086 | Winter pasture (aftermath); cut in February. *a* | 44.18 | 5.74 | 5.97 | 14.02 | 28.36 | 1.73 | 10.3 | 10.7 | 25.1 | 50.8 | 3.1 | do | 1086 |
| | Average 4 analyses, cut when seed was in milk. § | **24.36** | **7.00** | **6.30** | **24.47** | **34.27** | **3.60** | **9.2** | **8.3** | **32.3** | **45.4** | **4.8** | | |
| | Average 4 analyses, cut when seed was ripe. ‖ | **27.80** | **6.39** | **5.84** | **23.84** | **33.11** | **3.02** | **8.8** | **8.1** | **33.0** | **45.9** | **4.2** | | |
| | Teosinte (*Euchlæna luxurians*), from the same root: | | | | | | | | | | | | | |
| 1087 | First growth, height 10 feet | 6.78 | 7.63 | 6.81 | 29.95 | 45.93 | 2.90 | 8.2 | 7.3 | 32.1 | 49.3 | 3.1 | Vt. Ex. Sta. Rep., 1887, p. 129 | 1087 |
| 1088 | Second growth, height 6 feet; produced no seed | 3.31 | 8.86 | 8.15 | 28.37 | 48.81 | 2.50 | 9.2 | 8.4 | 29.3 | 50.5 | 2.6 | Vt. Ex. Sta. Rep., 1887, p. 130 | 1088 |
| | Hungarian grass, German millet (*Setaria italica*): | | | | | | | | | | | | | |
| 1089 | Dried | 4.85 | 5.19 | 5.56 | 31.27 | 50.91 | 2.24 | 5.4 | 5.9 | 32.9 | 53.4 | 2.4 | N. J. Ex. Sta. Rep., 1880, p. 47 | 1089 |
| 1090 | Time of cutting unknown | 6.93 | 5.62 | 7.55 | 26.95 | 50.19 | 2.76 | 6.0 | 8.2 | 29.0 | 53.8 | 3.0 | N. Y. Cornell Ex. Sta. Rep., 1882–'83, p. 41. | 1090 |
| 1091 | Do | 8.70 | 5.90 | 6.80 | 26.40 | 48.70 | 3.50 | 6.5 | 7.4 | 29.0 | 53.3 | 3.8 | Agr. of Me., 1882, p. 300 | 1091 |
| 1092 | In bloom | 7.45 | 5.30 | 8.75 | 29.58 | 46.87 | 2.05 | 5.7 | 9.5 | 32.0 | 50.6 | 2.2 | Mass. State Ex. Sta. Rep., 1889, p. 293. | 1092 |
| 1093 | Cut July 24, grown in Pennsylvania *a k* | 14.30 | 6.43 | 8.13 | 21.02 | 47.80 | 2.32 | 7.5 | 9.5 | 24.5 | 55.8 | 2.7 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 125. | 1093 |
| 1094 | Cut immediately after full bloom; cured in barn; grown on black alluvial soil. | 9.54 | 6.65 | 7.81 | 25.82 | 47.81 | 2.37 | 7.4 | 8.6 | 28.5 | 52.9 | 2.6 | Ky. Ex. Sta. Bul. 5, 1886, p. 20 | 1094 |

* Nos. 1007, 1011, 1013, 1015, 1017, 1019, 1028, 1048, 1052–1055.
‡ Nos. 1014, 1016, 1018, 1020, 1032, 1033, 1034, 1035, 1064–1067.
† Nos. 1008, 1010, 1012, 1021, 1029, 1030, 1049, 1056, 1057, 1058, 1059.
§ Nos. 1077–1080.
‖ Nos. 1081–1084.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **HAY AND OTHER DRIED COARSE FODDERS—Continued.** | | | | | | | | | | | | | |
| | HAY OF GRASSES—continued. | | | | | | | | | | | | | |
| 1095 | Hungarian grass, German millet (*Setaria italica*): | % | % | % | % | % | % | % | % | % | % | % | | |
| | Time of cutting unknown | 7.10 | 6.70 | 6.19 | 30.25 | 47.93 | 1.83 | 7.2 | 6.7 | 32.6 | 51.6 | 1.9 | N. J. Ex. Sta. Rep., 1886, p. 160 | 1095 |
| 1096 | Do | 9.05 | 5.03 | 12.25 | 27.35 | 44.62 | 1.70 | 5.5 | 13.5 | 30.1 | 49.0 | 1.9 | do | 1096 |
| 1097 | Do | 8.28 | 7.46 | 12.00 | 25.65 | 44.42 | 2.19 | 8.1 | 13.1 | 28.0 | 48.4 | 2.4 | do | 1097 |
| 1098 | Do | 8.14 | 6.72 | 7.06 | 23.58 | 52.82 | 1.68 | 7.3 | 7.7 | 25.6 | 57.5 | 1.9 | do | 1098 |
| 1099 | Do | 7.28 | 5.48 | 5.94 | 29.92 | 49.93 | 1.45 | 5.9 | 6.4 | 32.3 | 53.8 | 1.6 | do | 1099 |
| 1100 | Do | 7.65 | 6.11 | 5.00 | 27.81 | 51.53 | 1.90 | 6.6 | 5.4 | 30.1 | 55.8 | 2.1 | do | 1100 |
| 1101 | Do | 6.78 | 5.75 | 4.69 | 28.13 | 52.97 | 1.68 | 6.2 | 5.1 | 30.2 | 56.7 | 1.8 | do | 1101 |
| | All analyses, excluding No. 1093. Maximum | 9.54 | 7.46 | 12.25 | 31.27 | 52.97 | 3.50 | 8.1 | 13.5 | 32.9 | 57.5 | 3.8 | | |
| | All analyses, excluding No. 1093. Minimum | 4.85 | 5.03 | 4.69 | 23.58 | 44.42 | 1.45 | 5.4 | 5.1 | 24.5 | 48.4 | 1.6 | | |
| | All analyses, excluding No. 1093. Average | **7.66** | **5.99** | **7.46** | **27.72** | **49.05** | **2.12** | **6.5** | **8.1** | **30.0** | **53.1** | **2.3** | | |
| | Johnson grass or Mean's grass (*Sorghum halepense*): | | | | | | | | | | | | | |
| 1102 | Cut in 1878; grown in Alabama *a k* | 14.30 | 6.92 | 10.11 | 21.47 | 44.77 | 2.43 | 8.1 | 11.8 | 25.1 | 52.2 | 2.8 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 126. | 1102 |
| 1103 | Cut Sept. 1 | 6.10 | 5.21 | 4.35 | 35.45 | 47.11 | 1.78 | 5.5 | 4.6 | 37.9 | 50.1 | 1.9 | Ga. Ex. Sta. Bul. 7, 1890 | 1103 |
| | Fresh-water cord grass (*Spartina cynosuroides*): | | | | | | | | | | | | | |
| 1104 | Cut in 1879; grown in Minnesota *a k* | 14.30 | 6.19 | 8.41 | 22.10 | 46.07 | 2.93 | 7.2 | 9.8 | 25.8 | 53.8 | 3.4 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 125. | 1104 |
| 1105 | Cut in 1879; grown in Illinois *a k* | 14.30 | 5.61 | 5.55 | 19.62 | 52.38 | 2.54 | 6.6 | 6.4 | 22.9 | 61.1 | 3.0 | do | 1105 |
| 1106 | Cut in 1879; grown in Indian Territory *a k* | 14.30 | 4.46 | 4.18 | 23.31 | 50.84 | 2.91 | 5.2 | 4.9 | 27.2 | 59.3 | 3.4 | do | 1106 |
| 1107 | Cut Aug. 5, in bloom; grown on muddy banks of a creek; at high tide partly submerged. | 8.16 | 6.18 | 5.62 | 30.79 | 47.43 | 1.82 | 6.8 | 6.1 | 33.5 | 51.6 | 2.0 | Conn. State Ex. Sta. Rep., 1889, p. 245. | 1107 |
| | Red salt grass (*Spartina juncea*): | | | | | | | | | | | | | |
| 1108 | Cut in 1888; grown on salt marsh | 6.74 | 9.00 | 4.50 | 24.30 | 53.22 | 2.24 | 9.7 | 4.8 | 26.0 | 57.1 | 2.4 | Conn. State Ex. Sta. Rep., 1889, p. 243. | 1108 |
| 1109 | Cut June 22, 1889; spike not visible; growth thick, but low; grown on salt marsh. | 10.10 | 7.02 | 6.37 | 26.80 | 47.08 | 2.63 | 7.8 | 7.1 | 29.8 | 52.4 | 2.9 | do | 1109 |
| 1110 | Cut July 13, 1889; in bloom* | 9.22 | 12.19 | 6.50 | 26.14 | 43.64 | 2.31 | 13.4 | 7.2 | 28.8 | 48.1 | 2.5 | do | 1110 |
| 1111 | Cut Aug. 5, 1889; in seed* | 9.01 | 5.78 | 4.44 | 27.18 | 51.09 | 2.50 | 6.4 | 4.9 | 29.9 | 56.1 | 2.7 | do | 1111 |
| 1112 | Cut Sept. 14, 1889; seed gone. * | 8.15 | 5.08 | 4.13 | 26.72 | 53.17 | 2.75 | 5.5 | 4.5 | 29.1 | 57.9 | 3.0 | do | 1112 |
| | Creek sedge (*Spartina stricta*, var. *glabra*): | | | | | | | | | | | | | |
| 1113 | Cut July 5; spikes not visible† | 9.72 | 15.30 | 8.44 | 25.53 | 39.02 | 1.99 | 16.9 | 9.4 | 28.3 | 43.2 | 2.2 | Conn. State Ex. Sta. Rep., 1889, p. 244. | 1113 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1114 | Cut Aug. 5; in bloom† | 8.18 | 8.48 | 6.81 | 26.72 | 47.75 | 2.06 | 9.2 | 7.4 | 29.1 | 52.1 | 2.2 | do | 1114 |
| 1115 | Grown on banks of a creek of brackish water; 6 feet high; cut Aug. 12; in bloom. | 7.37 | 8.33 | 4.00 | 27.28 | 51.25 | 1.77 | 9.0 | 4.3 | 29.5 | 55.3 | 1.9 | do | 1115 |
| 1116 | Grown on banks of a creek of salt water; 6 feet high; cut Aug. 12; in bloom. | 8.13 | 11.85 | 6.06 | 27.70 | 44.02 | 2.24 | 12.9 | 6.6 | 30.1 | 48.0 | 2.4 | do | 1116 |
| 1117 | Grown in middle of a salt marsh near Nos. 1113 and 1116; 1 foot high; cut Aug. 12; in bloom. | 8.25 | 9.66 | 7.62 | 27.39 | 44.90 | 2.18 | 10.5 | 8.3 | 29.8 | 49.0 | 2.4 | do | 1117 |
| | Maximum | 9.72 | 15.30 | 8.44 | 27.70 | 51.25 | 2.24 | 16.9 | 9.4 | 30.1 | 55.3 | 2.4 | | |
| | Minimum | 7.37 | 8.33 | 4.00 | 25.53 | 39.02 | 1.77 | 9.0 | 4.3 | 28.3 | 43.2 | 1.9 | | |
| | Average | **8.33** | **10.72** | **6.59** | **26.92** | **45.39** | **2.05** | **11.6** | **7.1** | **29.3** | **49.7** | **2.3** | | |
| | Gama grass, sesame grass (*Tripsacum dactyloides*): | | | | | | | | | | | | | |
| 1118 | Cut in 1878; grown in Mississippi *a k* | 14.30 | 5.30 | 7.37 | 22.72 | 48.26 | 2.05 | 6.2 | 8.6 | 26.5 | 56.3 | 2.4 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 125. | 1118 |
| 1119 | Cut Aug. 11, 1880; grown in Pennsylvania *a k* | 14.30 | 4.58 | 6.86 | 19.24 | 52.11 | 2.97 | 5.3 | 7.9 | 22.5 | 60.8 | 3.5 | do | 1119 |
| | Broad-flowered fescue grass (*Uniola latifolia*): | | | | | | | | | | | | | |
| 1120 | Cut in 1879; grown in Alabama *a k* | 14.30 | 12.55 | 9.32 | 31.91 | 29.25 | 2.67 | 14.6 | 10.9 | 37.2 | 34.2 | 3.1 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127. | 1120 |
| 1121 | Cut in 1879; grown in Indian Territory *a k* | 14.30 | 8.93 | 5.55 | 21.13 | 47.94 | 1.75 | 10.4 | 6.5 | 24.7 | 55.9 | 2.5 | do | 1121 |
| | Wild rice, Indian rice (*Zizania aquatica*): | | | | | | | | | | | | | |
| 1122 | Cut July 13, coming into bloom; grown on a river bank. | 9.86 | 16.95 | 8.56 | 25.44 | 36.28 | 2.91 | 18.8 | 9.5 | 28.2 | 40.3 | 3.2 | Conn. State Ex. Sta. Rep., 1889, p. 245. | 1122 |
| 1123 | Cut Aug. 5, in bloom; grown on a river bank *k* | 8.23 | 14.25 | 7.12 | 31.06 | 37.29 | 2.05 | 15.5 | 7.8 | 33.8 | 40.7 | 2.2 | do | 1123 |
| 1124 | Northern or mountain redtop (*Agrostis exarata*), cut in 1878; grown in Wisconsin. *a k* | 14.30 | 5.10 | 9.09 | 21.01 | 48.53 | 1.97 | 5.9 | 10.7 | 24.5 | 56.6 | 2.3 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127. | 1124 |
| 1125 | Beard grass (*Andropogon argenteus*), cut in 1880; grown in Indian Territory. *a k* | 14.30 | 3.11 | 3.20 | 21.76 | 55.01 | 2.62 | 3.6 | 3.7 | 25.4 | 64.2 | 3.1 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 126. | 1125 |
| 1126 | Heavy-topped broom grass (*Andropogon macrourus*), grown in Alabama. *a k* | 14.30 | 3.21 | 4.94 | 25.50 | 49.87 | 2.18 | 3.7 | 5.7 | 29.8 | 58.2 | 2.6 | do | 1126 |
| 1127 | Broom sedge (*Andropogon virginicus*), cut in 1878; grown in Texas. *a k* | 14.30 | 8.00 | 2.57 | 28.35 | 45.35 | 1.43 | 9.3 | 3.0 | 33.1 | 52.9 | 1.7 | do | 1127 |
| 1128 | Beard grass, three-awned grass (*Aristida purpurascens*), grown in Indian Territory. *a k* | 14.30 | 5.81 | 3.70 | 21.32 | 52.59 | 2.22 | 6.9 | 4.3 | 24.9 | 61.3 | 2.6 | do | 1128 |
| 1129 | Wild oat grass (*Avena striata*), cut in 1879; grown in Vermont. *a k* | 14.30 | 4.25 | 7.50 | 22.42 | 48.10 | 3.43 | 4.9 | 8.8 | 26.2 | 56.1 | 4.0 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127. | 1129 |
| 1130 | Grama grass, mesquite grass (*Bouteloua oligostachya*), cut in 1879; grown in Minnesota. *a k* | 14.30 | 6.69 | 7.35 | 19.41 | 49.58 | 2.67 | 7.8 | 8.6 | 22.7 | 57.8 | 3.1 | do | 1130 |
| 1131 | Mesquite grass, tall grama grass (*Bouteloua racemosa*), cut when ripe; grown in Colorado. | 8.80 | 9.20 | 3.82 | 21.81 | 54.67 | 1.70 | 10.1 | 4.2 | 23.9 | 59.9 | 1.9 | Colo. Ex. Sta. Bul. No. 8, 1889. | 1131 |
| 1132 | Chess, cheat (*Bromus carinatus*), cut in 1878; grown in Illinois. *a k* | 14.30 | 9.32 | 8.50 | 22.91 | 42.67 | 2.30 | 10.9 | 9.9 | 26.7 | 49.8 | 2.7 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 128. | 1132 |
| 1133 | Chess, cheat (*Bromus secalinus*), cut in 1879; grown in New Hampshire. *a k* | 14.30 | 6.10 | 6.61 | 20.39 | 49.11 | 3.49 | 7.1 | 7.7 | 23.8 | 57.3 | 4.1 | do | 1133 |
| 1134 | Schrader's grass, rescue grass (*Bromus unioloides*), cut in 1879; grown in District of Columbia. *a k* | 14.30 | 8.35 | 11.67 | 17.64 | 44.97 | 3.07 | 9.7 | 13.6 | 20.6 | 52.5 | 3.6 | do | 1134 |

* Grown on same salt marsh.

† Grown on muddy banks of a creek.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | HAY AND OTHER DRIED COARSE FODDERS—Continued. | | | | | | | | | | | | | |
| | HAY OF GRASSES—continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 1135 | Wood reed grass (*Cinna arundinacea*), grown in Indian Territory. *a k* | 14.30 | 5.73 | 5.33 | 25.40 | 46.69 | 2.55 | 6.7 | 6.2 | 29.6 | 54.5 | 3.0 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884. p. 127. | 1135 |
| 1136 | Mountain oat grass (*Danthonia compressa*), cut in 1874; grown in Vermont. *a k* | 14.30 | 3.06 | 6.84 | 25.98 | 46.80 | 3.02 | 3.6 | 8.0 | 30.3 | 54.6 | 3.5 | do | 1136 |
| 1137 | Panic grass (*Panicum filiforme*), cut in 1878; grown in Alabama. *a k* | 14.30 | 7.57 | 2.54 | 22.14 | 52.24 | 1.27 | 8.8 | 3.0 | 25.8 | 60.9 | 1.5 | U. S. Dept. Agr., Chem. Comp. Am. Grasses. 1884. p. 125. | 1137 |
| 1138 | Spike grass, salt grass (*Distichlis maritima*), cut Aug. 31, 1889; grown in Connecticut. | 9.22 | 6.99 | 5.44 | 26.38 | 49.42 | 2.55 | 7.7 | 6.0 | 29.1 | 54.4 | 2.8 | Conn. State Ex. Sta. Rep., 1889. p. 244. | 1138 |
| 1139 | Wild rye (*Elymus canadensis*), cut in 1879; grown in Indian Territory. *a k* | 14.30 | 5.87 | 3.70 | 21.32 | 52.59 | 2.22 | 6.0 | 4.8 | 34.7 | 50.8 | 3.7 | U. S. Dept. Agr., Chem. Comp. Am. Grasses. 1884. p. 128. | 1139 |
| 1140 | Wild rye (*Elymus virginicus*), cut June 28, 1889, before bloom; grown in Connecticut. | 6.87 | 7.09 | 7.62 | 32.01 | 44.36 | 2.05 | 7.6 | 8.2 | 34.4 | 47.6 | 2.2 | Conn. State Ex. Sta. Rep., 1889, p. 245. | 1140 |
| 1141 | Teosinte (*Euchlæna luxurians*), in full bloom. *c* | 6.06 | 6.57 | 9.10 | 27.13 | 49.92 | 1.22 | 7.0 | 9.7 | 28.9 | 53.1 | 1.3 | Mass. State Ex. Sta. Rep., 1889. p. 178. | 1141 |
| 1142 | Sheep's fescue (*Festuca ovina*), grown in New Hampshire. *k* | 14.30 | 4.31 | 5.60 | 72.14 | | 3.65 | 5.0 | 6.5 | 84.2 | | 4.3 | U. S. Dept. Agr., Chem. Comp. Am. Grasses. 1884. p. 127. | 1142 |
| 1143 | Reed meadow grass, white spear grass (*Glyceria aquatica*), cut in 1879; grown in Vermont. *a k* | 14.30 | 6.26 | 6.97 | 21.94 | 48.64 | 1.89 | 7.3 | 8.1 | 25.6 | 56.8 | 2.2 | do | 1143 |
| 1144 | Vanilla or Seneca grass, holy grass (*Hierochloa borealis*), cut in 1878; grown in Illinois. *a k* | 14.30 | 7.99 | 12.12 | 19.73 | 42.38 | 3.48 | 9.3 | 14.1 | 23.0 | 49.5 | 4.1 | U. S. Dept. Agr., Chem. Comp. Am. Grasses. 1884. p. 126. | 1144 |
| 1145 | Feather or slender grass (*Leptochloa mucronata*), cut in 1878; grown in Texas. *a k* | 14.30 | 10.08 | 6.60 | 27.20 | 40.06 | 1.76 | 11.8 | 7.7 | 31.7 | 46.8 | 2.0 | U. S. Dept. Agr., Chem. Comp. Am. Grasses. 1884. p. 127. | 1145 |
| 1146 | English rye grass (*Lolium perenne*) grown in Pennsylvania. *a k* | 14.30 | 5.22 | 7.60 | 35.65 | 54.80 | 2.43 | 6.1 | 8.8 | 18.3 | 63.0 | 2.8 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 128. | 1146 |
| 1147 | Wild millet (*Milium effusum*), cut in 1880; grown in Vermont. *a k* | 14.30 | 7.95 | 13.69 | 21.05 | 39.69 | 3.32 | 9.3 | 16.0 | 24.5 | 46.3 | 3.9 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 126. | 1147 |
| 1148 | Spiked muhlenbergia (*Muhlenbergia glomerata*), cut in 1879; grown in Minnesota. *a k* | 14.30 | 12.87 | 17.42 | 15.15 | 35.32 | 4.94 | 15.0 | 20.3 | 17.7 | 41.2 | 5.8 | do | 1148 |
| 1149 | Wood grass (*Muhlenbergia mexicana*), cut Aug. 22, 1880; grown in Pennsylvania. *a k* | 14.30 | 3.71 | 4.13 | 19.45 | 56.11 | 2.30 | 4.3 | 4.8 | 22.7 | 65.5 | 2.7 | do | 1149 |
| 1150 | Drop seed (*Muhlenbergia*, sp.), cut in 1879; grown in New Hampshire. *a k* | 14.30 | 5.43 | 11.48 | 19.52 | 46.07 | 3.20 | 6.3 | 13.4 | 22.8 | 53.8 | 3.7 | do | 1150 |
| 1151 | Redtop panic (*Panicum agrostoides*), cut in 1879; grown in Indian Territory. *a k* | 14.30 | 5.73 | 5.05 | 26.45 | 43.59 | 4.88 | 6.7 | 5.9 | 30.8 | 50.9 | 5.7 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 125. | 1151 |
| 1152 | Old witch grass, hair-stalked panic (*Panicum capillare*), cut in 1879; grown in Indian Territory. *a k* | 14.30 | 4.89 | 5.98 | 24.20 | 47.39 | 3.34 | 5.6 | 7.0 | 28.2 | 55.3 | 3.9 | do | 1152 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1153 | Panic grass (*Panicum dichotomum*), cut in 1879; grown in Alabama. *a k* | 14.30 | 8.68 | 5.80 | 25.27 | 42.91 | 3.09 | 10.1 | 6.7 | 29.5 | 50.1 | 3.6 | ....do | 1153 |
| 1154 | Cane-like panic (*Panicum divaricatum*), cut in 1879; grown in Alabama. *a k* | 14.30 | 12.25 | 7.92 | 23.19 | 40.18 | 2.16 | 14.3 | 9.2 | 27.1 | 46.9 | 2.5 | ....do | 1154 |
| 1155 | Panic grass (*Panicum gibbum*), cut in 1878; grown in Alabama. *a k* | 14.30 | 7.31 | 10.47 | 20.71 | 43.65 | 3.56 | 8.5 | 12.3 | 24.1 | 50.9 | 4.2 | ....do | 1155 |
| 1156 | Guinea grass (*Panicum jumentorum*), cut in 1878; grown in Alabama. *a k* | 14.30 | 7.75 | 7.62 | 27.01 | 41.98 | 1.34 | 9.0 | 8.9 | 31.5 | 49.0 | 1.6 | ....do | 1156 |
| 1157 | Obtuse flowered panic (*Panicum obtusum*), cut in 1878; grown in Texas. *a k* | 14.30 | 9.38 | 6.21 | 28.38 | 39.80 | 1.93 | 10.9 | 7.3 | 33.1 | 46.4 | 2.3 | ....do | 1157 |
| 1158 | Panic grass (*Panicum proliferum*), cut in 1879; very ripe and rank; grown in Alabama. *a k* | 14.30 | 9.58 | 9.49 | 20.63 | 43.42 | 2.58 | 11.2 | 11.1 | 24.1 | 50.6 | 3.0 | ....do | 1158 |
| 1159 | Texas millet (*Panicum texanum*), cut in 1878; grown in Texas. *a k* | 14.30 | 8.65 | 4.70 | 23.16 | 47.07 | 2.12 | 10.1 | 5.5 | 27.0 | 54.9 | 2.5 | ....do | 1159 |
| 1160 | *Paspalum ovatum*, grown in Maine *a k* | 14.30 | 7.28 | 5.25 | 21.21 | 50.07 | 1.89 | 8.5 | 6.1 | 24.8 | 58.4 | 2.2 | ....do | 1160 |
| 1161 | *Paspalum præcox*. cut in 1879; grown in Alabama. *a k* | 14.30 | 6.35 | 5.08 | 21.69 | 49.49 | 3.09 | 7.4 | 5.9 | 25.3 | 57.8 | 3.6 | ....do | 1161 |
| 1162 | Canary grass (*Phalarisintermedia*, var. *angusta*), cut in 1879; grown in South Carolina. *a k* | 14.30 | 9.99 | 13.67 | 21.29 | 37.23 | 3.52 | 11.7 | 16.0 | 24.8 | 43.4 | 4.1 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 126. | 1162 |
| 1163 | Tall spear grass, wood grass (*Poa alsodes*), cut June 2, 1880; grown in Pennsylvania. *a k* | 14.30 | 8.06 | 11.86 | 18.21 | 44.06 | 3.51 | 9.4 | 13.8 | 21.3 | 51.4 | 4.1 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127. | 1163 |
| 1164 | Texas blue grass (*Poa arachnifera*), cut in 1882; grown in Texas. *a k* | 14.30 | 9.96 | 9.10 | 27.33 | 36.13 | 3.18 | 11.6 | 10.6 | 31.9 | 42.2 | 3.7 | ....do | 1164 |
| 1165 | Fowl meadow grass (*Poa serotina*), cut in 1878; grown in Wisconsin. *a k* | 14.30 | 3.63 | 5.37 | 17.87 | 56.40 | 2.43 | 4.2 | 6.3 | 20.9 | 65.8 | 2.8 | ....do | 1165 |
| 1166 | Pigeon grass, bottle grass, foxtail (*Setaria glauca*), cut Aug. 11, 1880; grown in Pennsylvania. *a k* | 14.30 | 6.80 | 7.30 | 18.80 | 50.18 | 2.62 | 7.9 | 8.6 | 21.9 | 58.5 | 3.1 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 125. | 1166 |
| 1167 | Bristle grass, foxtail (*Setaria setosa*), cut in 1878; grown in Texas. *a k* | 14.30 | 7.78 | 7.28 | 27.68 | 41.68 | 1.28 | 9.1 | 8.5 | 32.3 | 48.6 | 1.5 | ....do | 1167 |
| 1168 | Wild oats (*Sorghum nutans*), cut in 1879; grown in Indian Territory. *a k* | 14.30 | 4.46 | 3.32 | 24.53 | 51.21 | 2.18 | 5.2 | 3.9 | 28.6 | 59.8 | 2.5 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 126. | 1168 |
| 1169 | Smut grass (*Sporobolus indicus*), cut in 1879; grown in Mississippi. *a k* | 14.30 | 6.03 | 10.55 | 22.00 | 44.28 | 2.80 | 7.0 | 12.3 | 25.7 | 51.7 | 3.3 | ....do | 1169 |
| 1170 | Sand grass (*Triodia purpurea*), cut in 1879; grown in Indian Territory. *a k* | 14.30 | 4.42 | 6.90 | 24.97 | 46.23 | 3.18 | 5.2 | 8.1 | 29.1 | 53.9 | 3.7 | U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127. | 1170 |
| 1171 | Tall redtop (*Triodia sesleroides*), cut in 1878; grown in Texas. *a k* | 14.30 | 4.40 | 5.40 | 32.33 | 41.84 | 1.73 | 5.1 | 6.3 | 37.7 | 48.9 | 2.0 | ....do | 1171 |
| | HAY OF LEGUMES. | | | | | | | | | | | | | |
| | Common red clover (*Trifolium pratense sesleroides*): | | | | | | | | | | | | | |
| 1172 | Time of cutting unknown | 11.10 | 4.99 | 13.06 | 28.64 | 39.71 | 2.50 | 5.6 | 14.7 | 32.2 | 44.7 | 2.8 | N. J. Ex. Sta. Rep., 1880, p. 46 | 1172 |
| 1173 | Second growth | 8.47 | 5.86 | 10.00 | 27.10 | 45.47 | 3.10 | 6.4 | 10.9 | 29.6 | 49.7 | 3.4 | N. J. Ex. Sta. Rep., 1880, p. 47 | 1173 |
| 1174 | Time of cutting unknown | 21.82 | 5.13 | 10.88 | 24.67 | 35.03 | 2.47 | 6.2 | 13.9 | 31.6 | 45.3 | 3.0 | N. Y. Cornell Ex. Sta. Rep., 1882–'83, p. 41. | 1174 |
| 1175 | Cut May 24; heads beginning to form | 11.00 | 7.49 | 20.75 | 15.60 | 41.14 | 4.02 | 8.4 | 23.3 | 17.5 | 46.3 | 4.5 | Pa. State Col. Bul. 5, 1883, p. 44 | 1175 |
| 1176 | Cut June 5; heads formed | 9.73 | 6.98 | 16.59 | 21.09 | 42.38 | 3.23 | 7.7 | 18.4 | 23.4 | 47.0 | 3.5 | ....do | 1176 |
| 1177 | Cut June 22; full bloom *h** | 12.60 | 6.18 | 12.81 | 24.53 | 41.12 | 2.76 | 7.1 | 14.6 | 28.1 | 47.0 | 3.2 | ....do | 1177 |
| 1178 | Cut July 3; some heads dead *h** | 17.23 | 5.46 | 11.33 | 30.13 | 33.30 | 2.55 | 6.6 | 13.7 | 36.4 | 40.2 | 3.1 | ....do | 1178 |
| 1179 | Cut July 19; heads all dead *h** | 15.15 | 5.25 | 10.62 | 31.83 | 34.79 | 2.36 | 6.2 | 12.5 | 37.5 | 41.0 | 2.8 | ....do | 1179 |
| 1180 | Time of cutting unknown | 10.20 | 7.45 | 12.13 | 30.83 | 36.88 | 2.51 | 8.3 | 13.6 | 34.3 | 41.0 | 2.8 | N. J. Ex. Sta. Rep., 1884, p. 106 | 1180 |

* Stored in barn five or six months.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **HAY AND OTHER DRIED COARSE FODDERS—Continued.** | | | | | | | | | | | | | |
| | HAY OF LEGUMES—continued. | | | | | | | | | | | | | |
| | Common red clover (*Trifolium pratense*)—Cont'd | % | % | % | % | % | % | % | % | % | % | % | | |
| 1181 | Time of cutting unknown | 16.13 | 4.29 | 11.31 | 27.12 | 39.58 | 1.57 | 5.1 | 13.5 | 32.3 | 47.2 | 1.9 | Wis. Univ. Bul. 3, 1884, p. 6 | 1181 |
| 1182 | Do | 16.41 | 4.17 | 10.88 | 27.58 | 39.49 | 1.47 | 5.0 | 13.0 | 33.0 | 47.2 | 1.8 | do | 1182 |
| 1183 | Do | 15.41 | 3.88 | 11.61 | 27.27 | 40.04 | 1.79 | 4.6 | 13.7 | 32.2 | 47.4 | 2.1 | do | 1183 |
| 1184 | Do | 16.34 | 4.06 | 11.39 | 27.51 | 39.22 | 1.48 | 4.9 | 13.6 | 32.9 | 46.8 | 1.8 | do | 1184 |
| 1185 | Cut July 13; in bloom | 7.98 | 7.71 | 15.37 | 26.84 | 37.82 | 4.28 | 8.4 | 16.7 | 29.2 | 41.1 | 4.6 | Mc. Ex. Sta. Rep., 1885–'86, p. 51 | 1185 |
| 1186 | First cut *b* | 6.11 | 7.40 | 13.00 | 29.71 | 41.40 | 2.38 | 7.9 | 13.8 | 31.6 | 44.2 | 2.5 | N. J. Ex. Sta. Rep., 1886, p. 158 | 1186 |
| 1187 | Second cut *b* | 7.12 | 8.33 | 13.81 | 25.82 | 42.05 | 2.87 | 9.0 | 14.9 | 27.8 | 45.2 | 3.1 | do | 1187 |
| 1188 | First cut | 7.88 | 6.59 | 13.56 | 27.28 | 42.81 | 1.88 | 7.1 | 14.8 | 29.6 | 46.4 | 2.1 | do | 1188 |
| 1189 | Second crop *b* | 8.45 | 6.71 | 13.00 | 27.65 | 42.44 | 1.75 | 7.3 | 14.2 | 30.2 | 46.3 | 2.0 | do | 1189 |
| 1190 | First crop *b* | 8.30 | 6.77 | 13.50 | 28.63 | 41.00 | 1.80 | 7.4 | 14.7 | 31.2 | 44.7 | 2.0 | do | 1190 |
| 1191 | Time of cutting unknown | 8.52 | 6.18 | 10.50 | 23.74 | 49.03 | 2.03 | 6.8 | 11.4 | 25.9 | 53.7 | 2.2 | do | 1191 |
| 1192 | Do. *b* | 8.50 | 6.42 | 13.50 | 24.60 | 44.60 | 2.38 | 7.0 | 14.7 | 26.9 | 48.8 | 2.6 | do | 1192 |
| 1193 | Do. *b* | 7.56 | 6.05 | 10.38 | 30.38 | 43.81 | 1.82 | 6.6 | 11.2 | 32.9 | 47.4 | 1.9 | do | 1193 |
| 1194 | Do. *b* | 7.62 | 4.95 | 10.31 | 35.65 | 39.27 | 2.20 | 5.4 | 11.2 | 38.6 | 42.4 | 2.4 | do | 1194 |
| 1195 | Cut in full bloom; grown on black alluvial soil.* | 9.80 | 7.86 | 14.22 | 25.53 | 38.91 | 3.68 | 8.7 | 15.8 | 28.3 | 43.1 | 4.1 | Ky. Ex. Sta. Bul. 5, 1886, p. 11 | 1195 |
| 1196 | Cut in bloom early in June; grown on rich upland; from stack.* | 9.98 | 7.76 | 15.81 | 28.42 | 35.11 | 2.92 | 8.6 | 17.6 | 31.6 | 39.0 | 3.2 | Ky. Ex. Sta. Bul. 5, 1886, p. 12 | 1196 |
| 1197 | Cut in full bloom; grown on black alluvial soil; from barn.* | 10.04 | 7.66 | 12.08 | 28.90 | 38.69 | 2.63 | 8.5 | 13.4 | 32.1 | 43.1 | 2.9 | do | 1197 |
| 1198 | Cut in full bloom; grown on wet black gravel soil; from stack.* | 10.70 | 6.31 | 10.63 | 26.32 | 43.42 | 2.62 | 7.1 | 11.9 | 29.5 | 48.6 | 2.9 | Ky. Ex. Sta. Bul. 5, 1886, p. 13 | 1198 |
| 1199 | Cut in full bloom early in June; grown on rich, level upland; fairly well cured and stored in barn.* | 11.63 | 6.49 | 14.22 | 29.95 | 35.29 | 2.42 | 7.3 | 16.1 | 33.9 | 46.0 | 2.7 | do | 1199 |
| 1200 | Cut when half of bloom had turned brown; grown on blue grass soil.* | 13.75 | 7.09 | 9.89 | 24.07 | 43.43 | 1.77 | 8.2 | 11.5 | 27.9 | 50.3 | 2.1 | Ky. Ex. Sta. Bul. 5, 1886, p. 14 | 1200 |
| 1201 | Time of cutting unknown | 8.05 | 7.28 | 13.81 | 23.16 | 44.68 | 3.02 | 7.9 | 14.9 | 25.2 | 48.7 | 3.3 | Mo. Col. Farm Bul. 27, 1887, p. 6 | 1201 |
| 1202 | Do | 14.00 | 5.20 | 13.52 | 27.50 | 34.51 | 5.27 | 6.0 | 15.7 | 31.9 | 40.2 | 6.2 | Ark. Ex. Sta. Rep., 1888, p. 132 | 1202 |
| 1203 | Second crop | 8.64 | 7.28 | 10.32 | 18.04 | 52.21 | 3.51 | 7.9 | 11.3 | 19.8 | 57.2 | 3.8 | Colo. Ex. Sta. Bul. 8, 1889 | 1203 |
| 1204 | Cut June 14; full bloom; 1 head out of 5 brown. *a* | 31.27 | 6.46 | 10.82 | 18.25 | 27.28 | 5.92 | 9.5 | 15.8 | 26.5 | 39.6 | 8.6 | Ill. Ex. Sta. Bul. 5, 1889 | 1204 |
| 1205 | Do. *a* | 28.67 | 6.03 | 11.23 | 18.30 | 30.51 | 5.26 | 8.5 | 15.8 | 25.4 | 42.9 | 7.4 | do | 1205 |
| 1206 | Do. *a* | 29.12 | 5.64 | 11.47 | 19.22 | 28.96 | 5.64 | 8.0 | 16.2 | 27.2 | 40.6 | 8.0 | do | 1206 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1207 | Do. *a* | 29.77 | 5.79 | 11.06 | 17.87 | 30.57 | 4.94 | 8.3 | 15.8 | 25.5 | 43.4 | 7.0 | do | 1207 |
| | Average *a h i j* | **29.71** | **6.00** | **11.17** | **18.37** | **29.29** | **5.46** | **8.5** | **15.9** | **26.1** | **41.7** | **7.8** | | |
| 1208 | Cut June 21, 22; three quarters of the heads dead; few lower leaves brown. *a* | 30.40 | 5.73 | 10.66 | 20.85 | 28.43 | 3.93 | 8.2 | 15.3 | 30.0 | 40.8 | 5.7 | do | 1208 |
| 1209 | Do. *a* | 22.31 | 6.16 | 12.24 | 21.14 | 33.25 | 4.90 | 7.9 | 15.8 | 27.2 | 42.8 | 6 3 | do | 1209 |
| 1210 | Do. *a* | 22.83 | 6.40 | 12.16 | 19.77 | 34.36 | 4.48 | 8.3 | 15.8 | 25.6 | 44.5 | 5.8 | do | 1210 |
| 1211 | Do. *a* | 25.86 | 5.83 | 11.67 | 20.46 | 30.30 | 5.90 | 7.9 | 15.8 | 27.6 | 40.8 | 7.9 | do | 1211 |
| | Average *a h i j* | **25.35** | **6.04** | **11.68** | **20.61** | **31.58** | **4.74** | **8.1** | **15.6** | **27.6** | **42.3** | **6.4** | | |
| 1212 | Time of cutting unknown | 8 35 | 7.16 | 12.38 | 24.62 | 41.79 | 5.70 | 7.9 | 13.6 | 26.8 | 45.5 | 6.2 | Ind. Ex. Sta. Bul. 24, 1889 | 1212 |
| 1213 | Cut June 21; in bloom *c* | 6.02 | 8.30 | 13.82 | 28.11 | 41.27 | 2.48 | 8.9 | 14.7 | 29.9 | 43.9 | 2.6 | Mass. State Ex. Sta. Rep., 1889, p. 163 | 1213 |
| | All analyses, common red clover, excluding Nos. 1195–1200. Maximum | 31.27 | 8.33 | 20.75 | 35.65 | 52.21 | 5.92 | 9.5 | 23.3 | 38.6 | 57.2 | 8.6 | | |
| | Minimum | 6.02 | 3.88 | 10.00 | 15.60 | 27.28 | 1.47 | 4.6 | 10.9 | 17.5 | 39.0 | 1.8 | | |
| | Average | **15.26** | **6.15** | **12.32** | **24.75** | **38.20** | **3.32** | **7.3** | **14.5** | **29.1** | **45.2** | **3.9** | | |
| | Five analyses in bloom† Maximum | 31.27 | 8.30 | 15.37 | 28.11 | 41.27 | 5.92 | 9.5 | 16.7 | 29.9 | 47 0 | 8.1 | | |
| | Minimum | 6.02 | 5.64 | 10.82 | 17.87 | 27.28 | 2.48 | 7.1 | 14.6 | 25.1 | 39.6 | 2.6 | | |
| | Average | **20.78** | **6.59** | **12.38** | **21.85** | **33.92** | **4.48** | **8.3** | **15.6** | **27.5** | **43.0** | **5.6** | | |
| | Mammoth red clover (*Trifolium medium*): | | | | | | | | | | | | | |
| 1214 | Cut June 30; about 1 head in 10 in bloom; others small and green. *a h i j* | 23.72 | 5.71 | 10.34 | 23.88 | 31.02 | 5.33 | 7.5 | 13.6 | 31.2 | 40.7 | 7.0 | Ill. Ex. Sta. Bul. 5, 1889 | 1214 |
| 1215 | Do. *a h i j* | 29.44 | 5.78 | 9.88 | 21.63 | 28.57 | 4.70 | 8.2 | 14.0 | 30.6 | 40.5 | 6.7 | do | 1215 |
| 1216 | Do. *a h i j* | 24.12 | 5.99 | 10.60 | 23.00 | 31.22 | 5.07 | 7.9 | 14.0 | 30.3 | 41 1 | 6.7 | do | 1216 |
| 1217 | Do. *a h i j* | 27.96 | 5.74 | 9.90 | 20.91 | 30.96 | 4.53 | 8.0 | 13 8 | 29.0 | 42.9 | 6.3 | do | 1217 |
| | Average | **26.31** | **5.80** | **10.20** | **22.35** | **30.44** | **4.90** | **7.9** | **13.8** | **30.3** | **41.3** | **6.7** | | |
| 1218 | Cut July 11; half the heads in full bloom; some turning brown; lodged. *a h i j* | 26.70 | 5.20 | 9.62 | 25.08 | 28.86 | 4.56 | 7.1 | 13.1 | 34.2 | 39.4 | 6.2 | do | 1218 |
| 1219 | Do. *a h i j* | 24.08 | 4.96 | 9.96 | 27.24 | 28.64 | 5.12 | 6.5 | 13.1 | 35.9 | 37.7 | 6.8 | do | 1219 |
| 1220 | Do. *a h i j* | 26.60 | 4.45 | 8.99 | 25.06 | 31.60 | 3.30 | 6.1 | 12.3 | 34.1 | 43.0 | 4.5 | do | 1220 |
| | Average | **25.79** | **4.88** | **9.52** | **25.78** | **29.71** | **4.32** | **6.6** | **12.8** | **34.8** | **40.0** | **5.8** | | |
| 1221 | Cut July 23; three fourths to four fifths of the heads brown; seed ripe; lower leaves dead. *a h i j* | 19.62 | 4.86 | 9.14 | 26.02 | 36.20 | 4.16 | 6.0 | 11.4 | 32.4 | 45.0 | 5.2 | do | 1221 |
| 1222 | Do. *a h i j* | 18.34 | 5.71 | 9.29 | 24.00 | 38.72 | 3.94 | 7.0 | 11.4 | 29.4 | 47.4 | 4.8 | do | 1222 |
| 1223 | Do. *a h i j* | 20.63 | 4.99 | 9.03 | 29.39 | 31.73 | 4.23 | 6.3 | 11.4 | 37.0 | 40.0 | 5.3 | do | 1223 |
| | Average | **19.53** | **5.18** | **9.15** | **26.50** | **35.54** | **4.10** | **6.4** | **11.4** | **32.9** | **44.2** | **5.1** | | |

* Salted when stored.

† Nos. 1177, 1185, 1204, 1207, 1213.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **HAY AND OTHER DRIED COARSE FODDERS—Continued.** | | | | | | | | | | | | | |
| | HAY OF LEGUMES—continued. | | | | | | | | | | | | | |
| | Mammoth red clover (*Trifolium medium*)—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 1224 | Cut June 21; in bloom; fertilized *c* | 17.53 | 8.65 | 12.12 | 27.79 | 31.99 | 1.92 | 10.5 | 14.7 | 33.7 | 38.8 | 2.3 | Mass. State Ex. Sta. Rep., 1889, p. 164 | 1224 |
| 1225 | Cut June 21; in bloom; unfertilized *c* | 9.36 | 9.52 | 16.77 | 18.31 | 44.41 | 1.63 | 10.5 | 18.5 | 20.2 | 49.0 | 1.8 | do | 1225 |
| 1226 | Cut July 13; in seed; unfertilized *c* | 7.34 | 7.86 | 13.05 | 26.49 | 43.13 | 2.13 | 8.5 | 14.1 | 28.6 | 46.5 | 2.3 | do | 1226 |
| | All analyses, mammoth red clover. Maximum | 29.44 | 9.52 | 16.77 | 29.39 | 44.41 | 5.33 | 10.5 | 18.5 | 37.0 | 49.0 | 7.0 | | |
| | All analyses, mammoth red clover. Minimum | 7.34 | 4.45 | 8.99 | 18.31 | 28.57 | 1.63 | 6.0 | 11.4 | 20.2 | 37.7 | 1.8 | | |
| | All analyses, mammoth red clover. Average | **21.18** | **6.11** | **10.67** | **24.52** | **33.63** | **3.89** | **7.3** | **13.5** | **31.3** | **43.0** | **4.9** | | |
| | Five analyses in bloom.* Maximum | 26.70 | 9.52 | 16.77 | 27.79 | 44.41 | 5.12 | 10.5 | 18.5 | 35.9 | 49.0 | 6.8 | | |
| | Five analyses in bloom.* Minimum | 9.36 | 4.45 | 8.99 | 18.31 | 28.64 | 1.63 | 6.1 | 12.3 | 20.2 | 37.3 | 1.8 | | |
| | Five analyses in bloom.* Average | **20.85** | **6.56** | **11.49** | **24.69** | **33.11** | **3.30** | **8.2** | **14.6** | **31.1** | **41.9** | **4.2** | | |
| | Alsike clover (*Trifolium hybridum*): | | | | | | | | | | | | | |
| 1227 | Cut July 13; in bloom | 5.27 | 9.34 | 16.06 | 28.63 | 36.47 | 4.23 | 9.9 | 16.9 | 30.2 | 38.5 | 4.5 | Me. Ex. Sta. Rep., 1885–'86, p. 51 | 1227 |
| 1228 | Time of cutting unknown | 7.46 | 6.44 | 11.44 | 29.52 | 43.53 | 1.64 | 6.9 | 12.4 | 32.0 | 47.0 | 1.7 | N. J. Ex. Sta. Rep., 1886, p. 158 | 1228 |
| 1229 | Cut Aug. 16; in bloom; fertilized | 8.64 | 9.98 | 13.68 | 24.00 | 41.06 | 2.64 | 10.9 | 15.0 | 26.3 | 44.9 | 2.9 | Mass. State Ex. Sta. Rep., 1887, p. 131 | 1229 |
| 1230 | Cut Aug. 16; in bloom; unfertilized | 8.30 | 12.24 | 15.88 | 19.66 | 40.93 | 2.99 | 13.4 | 17.3 | 21.4 | 44.6 | 3.3 | do | 1230 |
| 1231 | Cut in the fall | 13.90 | 6.36 | 10.51 | 24.60 | 41.47 | 3.15 | 7.4 | 12.2 | 28.6 | 48.2 | 3.6 | Vt. Ex. Sta. Rep., 1887, p. 126 | 1231 |
| 1232 | Cut in full bloom *a* | 12.55 | 7.86 | 12.69 | 27.86 | 35.63 | 3.41 | 9.0 | 14.5 | 31.9 | 40.7 | 3.9 | Me. Ex. Sta. Rep., 1888, p. 86 | 1232 |
| 1233 | Time of cutting unknown | 11.46 | 6.10 | 9.16 | 25.05 | 45.93 | 2.30 | 6.9 | 10.4 | 28.4 | 41.7 | 2.6 | Ark. Ex. Sta. Rep., 1888, p. 131 | 1233 |
| | All analyses Maximum | 13.90 | 12.24 | 16.06 | 29.52 | 45.93 | 4.23 | 13.4 | 17.3 | 32.0 | 48.2 | 4.5 | | |
| | All analyses Minimum | 5.27 | 6.10 | 9.16 | 19.66 | 35.63 | 1.64 | 6.9 | 10.4 | 21.4 | 38.5 | 1.7 | | |
| | All analyses Average | **9.66** | **8.33** | **12.77** | **25.62** | **40.72** | **2.90** | **9.3** | **14.2** | **28.4** | **44.9** | **3.2** | | |
| | White clover (*Trifolium repens*): | | | | | | | | | | | | | |
| 1234 | Cut July 13; in bloom | 8.68 | 7.05 | 20.00 | 20.26 | 38.21 | 5.80 | 7.7 | 21.9 | 22.1 | 42.0 | 6.3 | Me. Ex. Sta. Rep., 1885–'86, p. 51 | 1234 |
| 1235 | Time of cutting unknown | 7.08 | 8.95 | 14.06 | 27.25 | 40.56 | 2.10 | 9.7 | 15.2 | 29.4 | 43.4 | 2.3 | N. J. Ex. Sta. Rep., 1886, p. 158 | 1235 |
| 1236 | In bloom for some time *a* | 12.39 | 7.42 | 15.12 | 24.91 | 36.49 | 3.67 | 8.5 | 17.2 | 28.4 | 41.7 | 4.2 | Me. Ex. Sta. Rep., 1888, p. 86 | 1236 |
| 1237 | Cut in bloom; fertilized *c* | 13.52 | 13.75 | 14.26 | 23.18 | 33.38 | 1.91 | 15.9 | 16.5 | 26.8 | 38.6 | 2.2 | Mass. State Ex. Sta. Rep., 1889, p. 163 | 1237 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1238 | Cut in bloom; unfertilized *c* | 13.10 | 8.60 | 15.30 | 20.85 | 40.50 | 1.65 | 9.9 | 17.6 | 24.0 | 46.6 | 1.9 | do | 1238 |
| 1239 | Cut in seed; fertilized *c* | 6.08 | 7.79 | 13.90 | 30.34 | 39.07 | 2.82 | 8.3 | 14.8 | 32.3 | 41.6 | 3.0 | do | 1239 |
| 1240 | Cut Sept. 1 | 7.20 | 4.51 | 17.07 | 21.67 | 47.34 | 2.21 | 4.8 | 18.4 | 23.3 | 51.1 | 2.4 | Ga. Ex. Sta. Bul. 7, 1890 | 1240 |
| | All analyses — Maximum | 13.52 | 13.75 | 20.00 | 30.34 | 47.34 | 5.80 | 15.9 | 21.9 | 32.3 | 51.1 | 6.3 | | |
| | All analyses — Minimum | 6.08 | 4.51 | 13.90 | 20.26 | 33.38 | 1.65 | 4.8 | 14.8 | 22.1 | 38.6 | 1.9 | | |
| | All analyses — Average | **9.72** | **8.29** | **15.67** | **24.06** | **39.38** | **2.88** | **9.2** | **17.4** | **26.7** | **43.5** | **3.2** | | |
| | Alfalfa, lucern (*Medicago sativa*): | | | | | | | | | | | | | |
| 1241 | First growth cut July 2; beginning to bloom | 16.00 | 8.78 | 13.73 | 21.35 | 38.04 | 2.10 | 10.5 | 16.3 | 25.4 | 45.3 | 2.5 | Mass. State Ex. Sta. Rep., 1885, p. 70 | 1241 |
| 1242 | First cut *b* | 7.55 | 8.61 | 18.56 | 26.22 | 36.66 | 2.40 | 9.3 | 20.1 | 28.3 | 39.7 | 2.6 | N. J. Ex. Sta. Rep., 1886, p. 160 | 1242 |
| 1243 | Second cut *b* | 5.66 | 6.49 | 17.56 | 33.04 | 35.45 | 1.80 | 6.9 | 18.6 | 35.0 | 37.6 | 1.9 | do | 1243 |
| 1244 | Third cut *b* | 6.25 | 6.19 | 15.00 | 31.38 | 39.22 | 1.96 | 6.6 | 16.0 | 33.5 | 41.8 | 2.1 | do | 1244 |
| 1245 | First cut Aug. 16; in bloom; fertilized | 8.33 | 6.58 | 10.20 | 26.16 | 47.32 | 1.41 | 7.2 | 11.1 | 28.5 | 51.7 | 1.5 | Mass. State Ex. Sta. Rep., 1887, p. 131 | 1245 |
| 1246 | First cut Aug. 16; in bloom; unfertilized | 8.41 | 7.17 | 11.87 | 25.52 | 45.16 | 1.87 | 7.8 | 13.0 | 27.9 | 49.3 | 2.0 | do | 1246 |
| 1247 | Cut June 28; coming into bloom | 10.00 | 7.89 | 16.87 | 27.12 | 36.11 | 2.01 | 8.8 | 18.8 | 30.1 | 40.1 | 2.2 | Vt. Ex. Sta. Rep., 1887, p. 130 | 1247 |
| 1248 | Cut July 7; seed in dough; from same field as last. | 12.48 | 7.53 | 14.12 | 28.72 | 35.07 | 2.08 | 8.6 | 16.1 | 32.8 | 40.1 | 2.4 | do | 1248 |
| 1249 | Time of cutting unknown | 8.50 | 7.46 | 15.17 | 22.06 | 43.96 | 2.85 | 8.1 | 16.6 | 24.2 | 47.9 | 3.2 | Colo. Ex. Sta. Bul. 8, 1889 | 1249 |
| 1250 | Third crop; 26 days from previous cutting; no irrigation. | 9.91 | 10.35 | 19.79 | 16.72 | 40.55 | 2.68 | 11.5 | 21.9 | 18.6 | 45.0 | 3.0 | do | 1250 |
| 1251 | Cut for seed Sept. 25 | 8.77 | 7.23 | 11.20 | 22.32 | 46.64 | 3.84 | 7.9 | 12.3 | 24.5 | 51.1 | 4.2 | do | 1251 |
| 1252 | Third crop; very coarse | 6.62 | 8.47 | 11.50 | 24.59 | 46.57 | 2.25 | 9.1 | 12.2 | 26.3 | 50.0 | 2.4 | do | 1252 |
| 1253 | Cut July 15; irrigated 1 week after first cutting; in bloom. *h* | 9.31 | 10.20 | 10.55 | 14.00 | 53.64 | 2.30 | 11.2 | 11.6 | 15.4 | 59.3 | 2.5 | do | 1253 |
| 1254 | Cut June 6; adobe land; no irrigation *a* | 8.46 | 9.02 | 12.35 | 19.18 | 48.36 | 2.63 | 9.8 | 13.5 | 21.0 | 52.9 | 2.8 | do | 1254 |
| 1255 | Cut July 25; irrigated June 1 and July 15 *a* | 8.33 | 7.32 | 11.33 | 22.90 | 48.31 | 1.81 | 7.9 | 12.4 | 25.0 | 52.7 | 2.0 | do | 1255 |
| 1256 | Cut July 25; irrigated May *a* | 9.12 | 7.75 | 10.27 | 21.90 | 48.37 | 2.59 | 8.5 | 11.3 | 24.1 | 53.2 | 2.9 | do | 1256 |
| 1257 | Second crop | 9.75 | 7.87 | 11.64 | 19.92 | 48.47 | 2.35 | 8.8 | 12.9 | 22.2 | 53.4 | 2.7 | do | 1257 |
| 1258 | In bloom; fertilized *c* | 4.68 | 7.53 | 15.54 | 32.79 | 38.41 | 1.05 | 7.9 | 16.3 | 34.4 | 40.3 | 1.1 | Mass. State Ex. Sta. Rep., 1889, p. 165 | 1258 |
| 1259 | In bloom; unfertilized *c* | 4.60 | 6.77 | 13.74 | 30.91 | 42.93 | 1.05 | 7.1 | 14.4 | 32.4 | 45.0 | 1.1 | do | 1259 |
| 1260 | Time of cutting unknown | 7.26 | 3.97 | 20.28 | 27.41 | 39.02 | 2.06 | 4.3 | 21.9 | 29.5 | 42.0 | 2.3 | Ga. Ex. Sta. Bul. 7, 1890 | 1260 |
| 1261 | White lucern | 7.20 | 3.07 | 18.62 | 30.99 | 38.10 | 2.02 | 3.2 | 20.0 | 33.4 | 41.2 | 2.2 | do | 1261 |
| | All analyses — Maximum | 16.00 | 10.35 | 20.28 | 33.04 | 53.64 | 3.84 | 11.5 | 21.9 | 35.0 | 59.3 | 4.2 | | |
| | All analyses — Minimum | 4.60 | 3.07 | 10.20 | 14.00 | 35.07 | 1.05 | 3.2 | 11.1 | 15.4 | 37.6 | 1.1 | | |
| | All analyses — Average | **8.44** | **7.44** | **14.28** | **25.01** | **42.68** | **2.15** | **8.1** | **15.6** | **27.3** | **46.6** | **2.4** | | |
| 1262 | Sand lucern (*Medicago media*), cut in bloom | 8.80 | 8.73 | 14.84 | 19.41 | 45.86 | 2.36 | 9.6 | 16.2 | 21.3 | 50.3 | 2.6 | Mass. State Ex. Sta. Rep., 1885, p. 71 | 1262 |
| | Serradella (*Ornithopus sativus*): | | | | | | | | | | | | | |
| 1263 | Cut Aug. 14; in bloom | 7.20 | 5.45 | 16.56 | 22.62 | 45.97 | 2.20 | 5.9 | 17.8 | 24.4 | 49.5 | 2.4 | Mass. State Ex. Sta. Rep., 1884, p. 96 | 1263 |
| 1264 | Cut Sept. 3; fully matured | 8.70 | 5.90 | 13.93 | 22.95 | 45.86 | 2.66 | 6.5 | 15.3 | 25.1 | 50.2 | 2.9 | do | 1264 |
| 1265 | Cut July 12; in bloom | 11.71 | 10.35 | 15.24 | 19.36 | 40.47 | 2.87 | 11.7 | 17.3 | 21.9 | 45.8 | 3.3 | Vt. Ex. Sta. Rep., 1887, p. 127 | 1265 |
| 1266 | Blue melilot (*Melilotus cæruleus,*) cut Aug 8; past bloom *c* | 8.22 | 13.64 | 12.00 | 24.94 | 39.68 | 1.52 | 14.9 | 13.1 | 27.2 | 43.2 | 1.6 | Mass. State Ex. Sta. Rep., 1889, p. 181 | 1266 |
| 1267 | Yellow lupine (*Lupinus luteus*), cut July 12; in bloom. | 9.34 | 7.70 | 11.85 | 27.54 | 40.30 | 3.27 | 8.5 | 13.1 | 30.4 | 44.4 | 3.6 | Vt. Ex. Sta. Rep., 1887, p. 128 | 1267 |

*Nos. 1218, 1219, 1220, 1224, 1225.

| | | In fresh or air-dry material. | | | | | | Calculated to water-fresh substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **HAY AND OTHER DRIED COARSE FODDERS—Continued.** | | | | | | | | | | | | | |
| | HAY OF LEGUMES—continued. | | | | | | | | | | | | | |
| | Vetch (*Vicia sativa*): | % | % | % | % | % | % | % | % | % | % | % | | |
| 1268 | Cut Aug. 15; in bloom | 8.35 | 7.30 | 14.45 | 28.12 | 39.67 | 2.11 | 8.0 | 15.7 | 30.7 | 43.3 | 2.3 | Mass. State Ex. Sta. Rep., 1884 p. 94. | 1268 |
| 1269 | Cut Sept. 3; fully matured | 9.45 | 7.70 | 13.06 | 27.21 | 40.15 | 2.43 | 8.5 | 14.4 | 30.1 | 44.3 | 2.7 | Mass. State Ex. Sta. Rep., 1884, p. 95. | 1269 |
| 1270 | Winter vetch, cut July 19; in bloom | 11.85 | 5.79 | 23.07 | 19.70 | 36.61 | 2.98 | 6.6 | 26.2 | 22.3 | 41.5 | 3.4 | Vt. Ex. Sta. Rep., 1887, p. 127 | 1270 |
| 1271 | Spring vetch, cut July 12; in bloom | 11.08 | 7.09 | 15.99 | 26.12 | 37.31 | 2.41 | 8.0 | 18.0 | 29.4 | 41.9 | 2.7 | do | 1271 |
| 1272 | Variety unknown | 11.12 | 8.00 | 26.07 | 13.54 | 36.57 | 4.70 | 9.0 | 29.3 | 15.2 | 41.2 | 5.3 | U. S. Dept. Agr. Rep., 1879, p. 121 | 1272 |
| | Cowpea (*Dolichos*): | | | | | | | | | | | | | |
| 1273 | Variety unknown | 10.22 | 10.20 | 19.81 | 23.66 | 34.98 | 1.13 | 11.3 | 22.0 | 26.3 | 39.1 | 1.3 | N. J. Ex. Sta. Rep., 1882, p. 71 | 1273 |
| 1274 | Black variety | 13.38 | 6.02 | 13.56 | 17.96 | 46.40 | 2.68 | 7.0 | 15.6 | 20.8 | 53.5 | 3.1 | N. J. Ex. Sta. Rep., 1883, p. 74 | 1274 |
| 1275 | Whip-poor-will variety | 13.99 | 9.04 | 14.50 | 18.51 | 41.57 | 2.39 | 10.5 | 16.8 | 21.4 | 48.5 | 2.8 | do | 1275 |
| 1276 | Clay variety, cut Aug. 1; seeded down in latter part of May. | 9.30 | 8.64 | 15.44 | 21.38 | 41.78 | 3.46 | 9.5 | 17.0 | 23.6 | 46.1 | 3.8 | Mass. State Ex. Sta. Rep., 1884, p. 91. | 1276 |
| 1277 | Whip-poor-will variety; cut Aug. 1 | 9.65 | 9.45 | 15.30 | 20.20 | 41.89 | 3.51 | 10.5 | 17.0 | 22.3 | 46.3 | 3.9 | Mass. Ex. Sta. Rep., 1884, p. 92 | 1277 |
| 1278 | Cut Sept. 22; frosted | 11.00 | 6.14 | 14.10 | 16.73 | 49.52 | 2.51 | 6.9 | 15.9 | 18.8 | 55.6 | 2.8 | Vt. Ex. Sta. Rep., 1887, p. 126 | 1278 |
| 1279 | Cut Aug. 20; in full bloom *a c* | 10.11 | 6.68 | 16.05 | 16.53 | 47.00 | 3.63 | 7.4 | 17.9 | 18.4 | 52.3 | 4.0 | S. C. Ex. Sta. Rep., 1888, p. 125 | 1279 |
| 1280 | Second cutting; pods about ⅔ grown *a c* | 11.33 | 7.02 | 17.67 | 16.42 | 44.85 | 2.91 | 7.9 | 19.9 | 18.5 | 50.6 | 3.1 | S. C. Ex. Sta. Rep., 1888, p. 126 | 1280 |
| 1281 | Variety unknown | 7.60 | 3.18 | 20.25 | 26.01 | 39.36 | 3.69 | 3.5 | 22.0 | 28.1 | 42.4 | 4.0 | Ga. Ex. Sta. Bul. 7, 1890 | 1281 |
| | All analyses, excluding No. 1278. Maximum | 13.99 | 10.20 | 20.25 | 26.01 | 49.52 | 3.69 | 11.3 | 22.0 | 28.1 | 55.6 | 4.0 | | |
| | All analyses, excluding No. 1278. Minimum | 7.60 | 3.18 | 13.56 | 16.42 | 39.36 | 1.13 | 3.5 | 15.6 | 18.4 | 39.1 | 1.3 | | |
| | All analyses, excluding No. 1278. Average | **10.69** | **7.53** | **16.57** | **20.09** | **42.22** | **2.90** | **8.5** | **18.6** | **22.5** | **47.2** | **3.2** | | |
| 1282 | Soja bean (*Soja hispida*) *c* | 6.48 | 7.95 | 14.12 | 20.39 | 45.17 | 5.89 | 8.5 | 15.1 | 21.8 | 48.3 | 6.3 | Mass. State Ex. Sta. Rep., 1889, p. 144 | 1282 |
| 1283 | Cut Aug. 30 *c* | 6.12 | 6.07 | 14.90 | 19.49 | 48.14 | 5.28 | 6.5 | 15.9 | 20.8 | 51.3 | 5.5 | Mass. State Ex. Sta. Rep., 1889, p. 166 | 1283 |
| 1284 | Japan clover (*Lespedeza striata*), grown in Alabama. | 9.13 | 4.11 | 13.70 | 21.55 | 47.52 | 3.99 | 4.5 | 15.0 | 23.7 | 52.4 | 4.4 | U. S. Dept. Agr. Rep., 1879, p. 121 | 1284 |
| 1285 | Japan clover, grown in Arkansas | 12.82 | 12.82 | 13.84 | 26.45 | 30.63 | 3.44 | 14.6 | 15.8 | 30.4 | 35.3 | 3.9 | Ark. Ex. Sta. Rep., 1888, p. 131 | 1285 |
| 1286 | Beggar lice (*Desmodium molle*), grown in South Carolina. | 10.45 | 6.95 | 16.98 | 22.69 | 40.44 | 2.49 | 7.6 | 19.0 | 25.2 | 45.4 | 2.8 | U. S. Dept. Agr. Rep., 1879, p. 121 | 1286 |
| | Beach pea (*Lathyrus maritimus*): | | | | | | | | | | | | | |
| 1287 | Cut June 24, from Nantasket Beach, Cohasset, Massachusetts. | 7.88 | 6.99 | 23.25 | 29.35 | 27.58 | 4.95 | 7.6 | 25.2 | 31.8 | 30.1 | 5.3 | Bussey Inst. Bul. 5, 1875, p. 351 | 1287 |
| 1288 | Cut July 16; from Bar Harbor, Mount Desert, Maine. | 7.18 | 6.54 | 14.66 | 30.02 | 36.64 | 4.96 | 7.0 | 15.8 | 32.4 | 39.5 | 5.3 | do | 1288 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1289 | Cut Aug. 28; from Nonamesett Island, Massachusetts. | 7.79 | 8.60 | 18.19 | 26.99 | 35.39 | 3.04 | 9.3 | 19.7 | 29.3 | 38.4 | 3.3 | ....do | 1289 |
| | HAY OF SEDGES. | | | | | | | | | | | | | |
| | Bog sedge (*Carex stricta*), grown on bogs: | | | | | | | | | | | | | |
| 1290 | Cut June 11, 1873; going to seed; much seed lost. | 7.46 | 6.52 | 10.41 | 33.60 | 39.80 | 2.21 | 7.0 | 11.2 | 36.3 | 43.1 | 2.4 | Bussey Inst. Bul. 1875, p. 345 | 1290 |
| 1291 | Cut June 16, 1873; fresh grass contained 65.97 per cent water. | 7.33 | 6.17 | 9.38 | 33.91 | 41.08 | 2.13 | 6.7 | 10.1 | 36.6 | 44.3 | 2.3 | ....do | 1291 |
| 1292 | Cut Aug., 1874; no seed or flowers; many stalks and leaves dead. | 7.96 | 5.65 | 6.31 | 33.55 | 43.53 | 3.00 | 6.1 | 6.8 | 36.5 | 47.3 | 3.3 | ....do | 1292 |
| 1293 | Cut 1874 | 8.38 | 5.43 | 7.44 | 32.30 | 43.53 | 1.92 | 5.9 | 8.1 | 36.3 | 47.6 | 2.1 | ....do | 1293 |
| 1294 | Cut Dec. 26, 1874; dead and weather-beaten. | 9.32 | 4.42 | 4.63 | 39.99 | 40.90 | 0.74 | 4.9 | 5.1 | 44.1 | 45.0 | 0.9 | ....do | 1294 |
| | Snipsnap, two-tail (*Eleocharis rostellata*); grown on a salt marsh: | | | | | | | | | | | | | |
| 1295 | Cut June 22, soon after bloom | 8.67 | 9.47 | 9.32 | 24.61 | 45.51 | 2.42 | 10.4 | 10.2 | 26.9 | 49.8 | 2.7 | Conn. State Ex. Sta. Rep., 1889, p. 245 | 1295 |
| 1296 | Cut Aug. 12; seed hard | 8.09 | 10.72 | 8.25 | 24.25 | 46.29 | 2.40 | 11.7 | 8.9 | 26.4 | 50.4 | 2.6 | ....do | 1296 |
| 1297 | Woolly sedge grass (*Scirpus eriophorum*); grown in Indian Territory. | 4.88 | 6.52 | 4.41 | 28.72 | 52.62 | 2.85 | 6.9 | 4.7 | 30.2 | 55.2 | 3.0 | U. S. Dept. Agr. Rep., 1879, p. 123 | 1297 |
| 1298 | Sea club rush (*Scirpus maritimus*); grown on a salt marsh; cut June 22, 1889, soon after bloom. | 11.24 | 7.98 | 9.19 | 24.75 | 43.99 | 2.85 | 9.0 | 10.4 | 27.8 | 49.6 | 3.2 | Conn. State Ex. Sta. Rep., 1889, p. 244 | 1298 |
| 1299 | Larger three-square (*Scirpus olneyi*); grown on a salt marsh; cut July 28, 1889, soon after bloom, | 9.53 | 8.24 | 10.06 | 25.14 | 45.25 | 1.78 | 9.1 | 11.1 | 27.8 | 50.0 | 2.0 | Conn. State Ex. Sta. Rep., 1889, p. 245 | 1299 |
| | Three-square (*Scirpus pungens*); grown on a salt marsh: | | | | | | | | | | | | | |
| 1300 | Cut June 22, soon after bloom | Same locality. 7.97 | 8.59 | 8.31 | 25.10 | 47.41 | 2.62 | 9.3 | 9.0 | 27.3 | 51.5 | 2.9 | Conn. State Ex. Sta. Rep., 1889, p. 244 | 1300 |
| 1301 | Cut Aug. 12, seed dropping | Same locality. 7.89 | 8.56 | 6.50 | 23.76 | 50.49 | 2.80 | 9.3 | 7.1 | 25.8 | 54.8 | 3.0 | ....do | 1301 |
| 1302 | Cut July 13; seed hard | 8.00 | 8.22 | 7.44 | 30.22 | 43.97 | 2.15 | 8.9 | 8.1 | 32.9 | 47.8 | 2.3 | ....do | 1302 |
| 1303 | Cut Aug. 5; seed gone | 8.55 | 7.89 | 7.37 | 23.68 | 49.95 | 2.56 | 8.6 | 8.1 | 25.9 | 54.6 | 2.8 | ....do | 1303 |
| | HAY OF RUSHES. | | | | | | | | | | | | | |
| 1304 | Soft rush (*Juncus effusus*); cut Aug., 1875 | 6.88 | 2.63 | 6.75 | 41.48 | 42.26 | | 2.8 | 7.3 | 44.5 | 45.4 | | Bussey Inst. Bul. 1875, p. 351 | 1304 |
| | Black grass (*Juncus gerardi*): | | | | | | | | | | | | | |
| 1305 | Upper parts of stalks, with many seed vessels, but no seeds. | 7.17 | 4.90 | 7.39 | 35.90 | 42.55 | 2.09 | 5.3 | 8.0 | 38.6 | 45.8 | 2.3 | Bussey Inst. Bul. 1875, p. 342 | 1305 |
| 1306 | Cut 1874; excellent sample; many seeds upon the stalks. | 10.25 | 5.48 | 6.18 | 30.43 | 45.15 | 2.51 | 6.1 | 6.9 | 33.9 | 50.3 | 2.8 | ....do | 1306 |
| 1307 | Time of cutting unknown | 9.16 | 6.84 | 7.50 | 22.10 | 51.44 | 2.96 | 7.5 | 8.3 | 24.3 | 56.6 | 3.3 | N. J. Ex. Sta. Rep., 1882, p. 70 | 1307 |
| 1308 | Do | 11.02 | 6.92 | 7.06 | 29.42 | 43.14 | 2.38 | 8.0 | 8.1 | 22.9 | 47.3 | 2.7 | ....do | 1308 |
| 1309 | Do | 8.94 | 8.28 | 6.56 | 24.63 | 49.31 | 2.28 | 9.1 | 7.2 | 27.0 | 54.2 | 2.5 | ....do | 1309 |
| 1310 | Cut July 24, when beginning to look red, *e. g.*, approaching maturity. | 13.15 | 5.64 | 6.21 | 20.55 | 53.40 | 1.05 | 6.5 | 7.1 | 23.7 | 61.5 | 1.2 | Mass. State Ex. Sta. Rep., 1883, p. 73 | 1310 |
| 1311 | Cut June 24, before bloom | 10.22 | 7.75 | 8.43 | 22.25 | 49.99 | 1.36 | 8.6 | 9.4 | 24.8 | 55.7 | 1.5 | Mass. State Ex. Sta. Rep., 1883, p. 72 | 1311 |
| 1312 | Time of cutting unknown | 8.20 | 5.60 | 5.44 | 26.55 | 52.03 | 2.18 | 6.1 | 5.9 | 28.9 | 56.7 | 2.4 | N. J. Ex. Sta. Rep., 1886, p. 164 | 1312 |

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | Refcrences to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **HAY AND OTHER DRIED COARSE FODDERS—Continued.** | | | | | | | | | | | | | |
| | HAY OF RUSHES—continued. | | | | | | | | | | | | | |
| | Black grass *b* (*Juncus gerardi*)—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 1313 | Cut July 1, 1888* | 6.74 | 6.61 | 8.62 | 27.74 | 48.14 | 2.15 | 7.1 | 9.2 | 29.8 | 51.6 | 2.3 | Conn. State Ex. Sta. Rep., 1889, p. 243 | 1313 |
| 1314 | Cut Sept. 1, 1888* | 6.74 | 9.18 | 6.56 | 26.16 | 49.13 | 2.23 | 9.8 | 7.0 | 28.1 | 52.7 | 2.4 | ....do | 1314 |
| 1315 | Cut June 22, 1889; in bloom* | 8.15 | 7.96 | 9.20 | 25.37 | 46.61 | 2.71 | 8.7 | 10.0 | 27.6 | 50.7 | 3.0 | ....do | 1315 |
| 1316 | Cut June 22, 1889; seed in milk* | 10.04 | 5.80 | 7.44 | 27.40 | 46.93 | 2.39 | 6.4 | 8.3 | 30.4 | 52.2 | 2.7 | ....do | 1316 |
| 1317 | Cut Aug. 12, 1889; seed gone* | 7.35 | 4.97 | 5.31 | 28.20 | 52.09 | 2.08 | 5.4 | 5.7 | 30.5 | 56.2 | 2.2 | ....do | 1317 |
| 1318 | Cut June 30, 1889; seed in milk† | 10.58 | 8.71 | 8.12 | 25.06 | 45.21 | 2.32 | 9.7 | 9.1 | 28.0 | 50.6 | 2.6 | ....do | 1318 |
| 1319 | Cut Sept. 27, 1889; aftermath† | 8.99 | 9.22 | 7.50 | 23.43 | 47.78 | 3.08 | 10.1 | 8.2 | 25.8 | 52.5 | 3.4 | ....do | 1319 |
| 1320 | Cut July 20, 1889; seed almost ripe‡ | 9.94 | 7.93 | 7.75 | 24.10 | 47.38 | 2.90 | 8.8 | 8.6 | 26.7 | 52.7 | 3.2 | ....do | 1320 |
| 1321 | Cut Aug. 7, 1889; seed very ripe‡ | 9.51 | 7.01 | 7.37 | 24.41 | 48.84 | 2.86 | 7.7 | 8.2 | 27.0 | 54.0 | 3.1 | ....do | 1321 |
| 1322 | Cut Sept. 15, 1889; seed gone‡ | 11.49 | 5.37 | 6.69 | 26.36 | 47.23 | 2.86 | 6.0 | 7.6 | 29.8 | 53.4 | 3.2 | ....do | 1322 |
| 1323 | Cut Sept. 15, 1889; second growth‡ | 11.63 | 8.78 | 11.62 | 20.44 | 44.32 | 3.21 | 9.9 | 13.1 | 23.1 | 50.2 | 3.7 | ....do | 1323 |
| 1324 | Time of cutting unknown | 9.60 | 6.09 | 8.00 | 27.21 | 46.83 | 2.27 | 6.8 | 8.8 | 30.1 | 51.8 | 2.5 | ....do | 1324 |
| | All analyses—Maximum | 13.15 | 9.22 | 11.62 | 35.90 | 53.40 | 3.21 | 10.1 | 13.1 | 38.6 | 61.5 | 3.7 | | |
| | All analyses—Minimum | 6.74 | 4.90 | 5.31 | 20.44 | 42.55 | 1.05 | 5.3 | 5.7 | 22.9 | 45.8 | 1.2 | | |
| | All analyses—Average | **9.45** | **6.95** | **7.45** | **25.88** | **47.88** | **2.39** | **7.6** | **8.2** | **28.5** | **53.0** | **2.7** | | |
| | HAY OF MISCELLANEOUS PLANTS. | | | | | | | | | | | | | |
| 1325 | Blue weed, blue thistle (*Echium vulgare*), grown in West Virginia. | 7.92 | 6.25 | 5.78 | 20.42 | 57.16 | 2.47 | 6.7 | 6.3 | 22.1 | 62.2 | 2.7 | U. S. Dept. Agr. Rep., 1879, p. 121 | 1325 |
| 1326 | Sulla (*Hedysarum coronaria*) *c* | 10.46 | 7.88 | 15.22 | 11.10 | 52.56 | 2.78 | 8.8 | 17.0 | 12.4 | 58.7 | 3.1 | Mass. State Ex. Sta. Rep., 1889, p. 179. | 1326 |
| | White weed, oxeye daisy (*Chrysanthemum Leucanthemum*): | | | | | | | | | | | | | |
| 1327 | Cut in full bloom *a* | 9.63 | 6.85 | 8.44 | 29.00 | 41.72 | 4.36 | 7.6 | 9.3 | 32.1 | 46.2 | 4.8 | Me. Ex. Sta. Bul. 26, 1888, p. 6 | 1327 |
| 1328 | Cut June 30; in full bloom | 10.87 | 6.44 | 7.00 | 31.00 | 42.27 | 2.42 | 7.2 | 7.9 | 34.8 | 47.4 | 2.7 | Bussey Inst. Bul. 1875, p. 351 | 1328 |
| | Average | **10.25** | **6.64** | **7.72** | **30.00** | **42.00** | **3.39** | **7.3** | **8.5** | **33.5** | **46.9** | **3.8** | | |
| | Hairy lotus (*Lotus villosus*): | | | | | | | | | | | | | |
| 1329 | Second year's growth *c* | 10.68 | 7.32 | 12.06 | 21.88 | 45.38 | 2.68 | 8.2 | 13.5 | 24.5 | 50.8 | 3.0 | Mass. State Ex. Sta. Rep., 1889, p. 178. | 1329 |
| 1330 | First year's growth *c* | 12.36 | 7.27 | 14.11 | 13.23 | 50.66 | 2.37 | 8.3 | 16.1 | 15.1 | 57.8 | 2.7 | Mass. State Ex. Sta. Rep., 1889, p. 179. | 1330 |
| 1331 | Flowering fern (*Osmunda regalis*) | 8.23 | 6.73 | 7.38 | 25.59 | 49.10 | 2.97 | 7.2 | 8.1 | 27.9 | 53.5 | 3.3 | Bussey Inst. Bul., 1875, p. 351 | 1331 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1332 | Do. *c* | 14.56 | 6.09 | 10.24 | 21.60 | 45.10 | 2.41 | 7.2 | 11.9 | 25.2 | 52.9 | 2.8 | Conn. State Ex. Sta. Rep., 1886. p.112. | 1332 |
| 1333 | Ribwort plantain (*Plantago lanceolata*), grown in New Hampshire. | 7.85 | 6.90 | 9.80 | 20.24 | 51.10 | 4.11 | 7.4 | 10.7 | 21.9 | 55.5 | 4.5 | U. S. Dept. Agr. Rep., 1879, p. 121 | 1333 |
| | Buttercup (*Ranunculus acris*): | | | | | | | | | | | | | |
| 1334 | Cut in full bloom *a* | 10.43 | 6.01 | 9.06 | 30.44 | 40.71 | 3.34 | 6.7 | 10.1 | 34.0 | 45.5 | 3.7 | Me. Ex. Sta. Bul. 26, 1888 | 1334 |
| 1335 | Cut June 16; passing out of bloom | 8.24 | 5.21 | 10.66 | 30.70 | 41.55 | 3.63 | 5.7 | 11.6 | 33.5 | 45.3 | 3.9 | Bussey Inst. Bul., 1875, p. 351 | 1335 |
| | Average | **9.33** | **5.61** | **9.86** | **30.57** | **41.13** | **3.50** | **6.2** | **10.9** | **33.7** | **45.3** | **3.9** | | |
| 1336 | Mexican clover (*Richardsonia scabra*), grown in Alabama. | 6.34 | 7.82 | 5.60 | 27.79 | 49.38 | 2.89 | 8.3 | 5.9 | 29.8 | 53.0 | 3.0 | U. S. Dept. Agr. Rep., 1879, p. 121 | 1336 |
| | Goose grass (*Triglochin maritimum*), grown on a salt marsh: | | | | | | | | | | | | | |
| 1337 | Cut June 22; leaves only | 7.16 | 10.98 | 11.37 | 25.13 | 42.01 | 3.35 | 11.8 | 12.3 | 27.1 | 45.2 | 3.6 | Conn. State Ex. Sta. Rep., 1888, p. 244 | 1337 |
| 1338 | Cut July 13; stalks with green seed pods | 9.02 | 6.29 | 8.12 | 36.31 | 37.57 | 2.69 | 6.9 | 8.9 | 39.9 | 41.3 | 3.0 | do | 1338 |
| 1339 | Cat's-tail (*Typha latifolia*), grown on a salt marsh; cut July 13; leaves only. | 10.77 | 5.78 | 7.00 | 33.68 | 39.75 | 3.02 | 6.4 | 7.9 | 37.8 | 44.6 | 3.3 | Conn. State Ex. Sta. Rep., 1889, p. 245 | 1339 |
| | HAY OF MIXED MEADOW GRASSES. | | | | | | | | | | | | | |
| | Mostly timothy (*Phleum pratense*): | | | | | | | | | | | | | |
| 1340 | Cut in 1882 | 13.88 | 4.88 | 5.38 | 33.33 | 40.32 | 2.21 | 5.7 | 6.3 | 38.7 | 46.7 | 2.6 | N. Y. State Ex. Sta. Rep., 1883, p. 150 | 1340 |
| 1341 | Cut in 1883 | 15.22 | 4.94 | 5.14 | 31.28 | 41.36 | 2.06 | 5.8 | 6.1 | 36.9 | 48.8 | 2.4 | N. Y. State Ex. Sta. Rep., 1884, p. 330 | 1341 |
| 1342 | Baled Western hay | 6.84 | 3.82 | 8.12 | 31.70 | 44.62 | 4.90 | 4.1 | 8.7 | 34.1 | 47.8 | 5.3 | Ga. Ex. Sta. Bul. 7, 1890 | 1342 |
| 1343 | Do | 7.70 | 3.72 | 8.63 | 35.61 | 42.65 | 1.69 | 4.0 | 9.4 | 38.5 | 46.3 | 1.8 | do | 1343 |
| | Mostly timothy (*Phleum pratense*), and redtop (*Agrostis vulgaris*): | | | | | | | | | | | | | |
| 1344 | Cut June 17; grown on dry upland; mown 3 years. *a k* | 14.30 | 5.57 | 7.85 | 24.72 | 45.08 | 2.48 | 6.5 | 9.2 | 28.8 | 52.6 | 2.9 | Conn. State Ex. Sta. Rep., 1879, p. 79 | 1344 |
| 1345 | Cut June 18; grown on moderately dry irrigated intervale; mown 4 years. *a k* | 14.30 | 6.86 | 8.97 | 28.45 | 39.20 | 2.22 | 8.0 | 10.5 | 33.2 | 45.7 | 2.6 | do | 1345 |
| 1346 | Cut July 20; second cutting from new ground. *a k* | 14.30 | 4.81 | 6.02 | 26.54 | 46.88 | 1.45 | 5.6 | 7.0 | 31.0 | 54.7 | 1.7 | do | 1346 |
| 1347 | Cut last week in July; grown on moist upland. *a k* | 14.30 | 4.90 | 7.50 | 26.30 | 45.30 | 1.70 | 5.7 | 8.8 | 30.7 | 52.8 | 2.0 | do | 1347 |
| 1348 | Cut July 1; second cutting after seeding | 13.12 | 4.11 | 6.91 | 28.11 | 45.73 | 2.02 | 4.7 | 8.0 | 32.3 | 52.7 | 2.3 | Conn. State Ex. Sta. Rep., 1880, p. 83 | 1348 |
| 1349 | Time of cutting unknown | 12.00 | 3.50 | 6.25 | 30.36 | 45.84 | 2.05 | 4.0 | 7.1 | 34.5 | 52.1 | 2.3 | Me. Ex. Sta. Rep., 1885–'86, p. 51 | 1349 |
| 1350 | Do | 18.90 | 4.11 | 4.97 | 25.41 | 44.22 | 2.39 | 5.1 | 6.1 | 31.3 | 54.5 | 3.0 | Conn. State Ex. Sta. Rep., 1886. p.113. | 1350 |
| 1351 | Seed ripe; grown on black alluvial soil | 10.32 | 4.51 | 6.32 | 33.15 | 44.08 | 1.62 | 5.0 | 7.1 | 37.0 | 49.1 | 1.8 | Ky. Ex. Sta. Bul. 5, 1886, p. 19 | 1351 |
| 1352 | Seed nearly ripe | 11.15 | 5.05 | 4.67 | 34.84 | 41.95 | 2.34 | 5.7 | 5.3 | 39.2 | 47.2 | 2.6 | do | 1352 |
| 1353 | Redtop in full bloom; timothy riper | 11.57 | 4.78 | 5.21 | 38.41 | 38.53 | 1.50 | 5.4 | 5.9 | 43.4 | 43.6 | 1.7 | Ky. Ex. Sta. Bul. 5, 1886, p. 20 | 1353 |
| 1354 | Mostly timothy (*Phleum pratense*), and blue grass (*Poa pratensis*). | 14.30 | 4.70 | 7.00 | 26.90 | 45.40 | 1.70 | 5.5 | 8.2 | 31.3 | 53.0 | 2.0 | Kans. State Col. Rep., 1884, p. 5 | 1354 |
| 1355 | Mostly timothy (*Phleum pratense*), and orchard grass (*Dactylis glomerata*); grown on a river bottom. | 8.22 | 5.41 | 7.50 | 33.60 | 41.97 | 3.30 | 5.9 | 8.1 | 36.6 | 45.7 | 3.7 | Ga. Ex. Sta. Bul. 7, 1890 | 1355 |
| 1356 | Mostly blue grass (*Poa pratensis*), and redtop (*Agrostis vulgaris*). | 20.25 | 4.68 | 9.21 | 22.42 | 40.58 | 2.36 | 5.9 | 11.5 | 28.6 | 51.1 | 2.9 | Conn. State Ex. Sta. Rep., 1887, p. 100. | 1356 |

* Grown at Saybrook, Connecticut. † Grown at New Haven, Connecticut, Mill River marsh. ‡ Grown at New Haven, Connecticut, Quinnipiac marsh.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **HAY AND OTHER DRIED COARSE FODDERS—Continued.** | | | | | | | | | | | | | |
| | HAY OF MIXED MEADOW GRASSES—continued. | | | | | | | | | | | | | |
| | Unclassified: | % | % | % | % | % | % | % | % | % | % | % | | |
| 1357 | Cut first week in July; grown on old meadow; in grass 10 to 15 years. *a k* | 14.30 | 4.56 | 6.50 | 25.89 | 47.33 | 1.43 | 5.3 | 7.6 | 30.2 | 55.2 | 1.7 | Conn. State Ex. Sta. Rep., 1879, p. 79. | 1357 |
| 1358 | Cut fourth week in June; grown on old meadow. *a k* | 14.30 | 4.23 | 7.02 | 27.82 | 45.00 | 1.63 | 4.9 | 8.2 | 32.5 | 52.5 | 1.9 | do | 1358 |
| 1359 | Cut in 1884 | 18.00 | 4.54 | 5.74 | 32.19 | 36.88 | 2.65 | 5.5 | 7.0 | 39.3 | 45.0 | 3.2 | N. Y. State Ex. Sta. Rep., 1885, p. 303 | 1359 |
| 1360 | Cut in 1884; many daisies | 16.85 | 4.66 | 4.94 | 35.89 | 35.58 | 2.08 | 5.6 | 5.9 | 43.2 | 42.8 | 2.5 | do | 1360 |
| 1361 | Cut in 1885 | 12.97 | 5.22 | 7.02 | 34.35 | 38.17 | 2.27 | 6.0 | 8.1 | 39.5 | 43.8 | 2.6 | do | 1361 |
| 1362 | Time of cutting unknown | 14.77 | 4.85 | 7.88 | 35.38 | 34.41 | 2.71 | 5.7 | 9.2 | 41.5 | 40.4 | 3.2 | do | 1362 |
| 1363 | Do. *a* | 15.41 | 5.26 | 7.56 | 29.91 | 39.02 | 2.84 | 6.2 | 8.9 | 35.4 | 46.1 | 3.4 | N. Y. State Ex. Sta. Rep., 1888, p. 237. | 1363 |
| 1364 | Do. *a* | 14.95 | 4.97 | 6.38 | 27.55 | 43.65 | 2.50 | 5.8 | 7.5 | 32.5 | 51.3 | 2.9 | N. Y. State Ex. Sta. Rep., 1888, p. 238. | 1364 |
| | HAY OF MIXED GRASSES AND LEGUMES. | | | | | | | | | | | | | |
| 1365 | Timothy (*Phleum pratense*) and red clover (*Trifolium pratense*). | 11.37 | 4.81 | 6.38 | 29.53 | 45.19 | 2.72 | 5.4 | 7.2 | 33.2 | 51.2 | 3.0 | N. J. Ex. Sta. Rep., 1880, p. 46 | 1365 |
| 1366 | Do | 8.20 | 3.90 | 5.50 | 30.80 | 48.90 | 2.70 | 4.2 | 6.0 | 33.6 | 53.3 | 2.9 | Agr. of Me., 1882, p. 300 | 1366 |
| | Timothy (*Phleum pratense*) and Alsike clover (*Trifolium hybridum*): | | | | | | | | | | | | | |
| 1367 | Cut when partly out of bloom | 11.10 | 6.27 | 10.06 | 30.36 | 39.24 | 2.97 | 7.1 | 11.3 | 34.1 | 44.2 | 3.3 | Me. Ex. Sta. Rep., 1886–'87, p. 68 | 1367 |
| 1368 | Do | 10.18 | 6.36 | 10.00 | 30.15 | 40.36 | 2.95 | 7.1 | 11.1 | 33.6 | 44.9 | 3.3 | do | 1368 |
| | Mixed grasses and clovers: | | | | | | | | | | | | | |
| 1369 | Seeded with blue grass, timothy, redtop and white clover, and mown 3 years; from dry upland; cut May 30. *a k* | 14.30 | 5.30 | 14.42 | 19.66 | 43.23 | 3.09 | 6.2 | 16.8 | 23.0 | 50.4 | 3.6 | Conn. State Ex. Sta. Rep., 1879, p. 79. | 1369 |
| 1370 | Seeded with red clover; from dry upland; cut June 5. *a k* | 14.30 | 6.49 | 11.62 | 23.06 | 42.07 | 2.46 | 7.6 | 13.6 | 26.9 | 49.0 | 2.9 | do | 1370 |
| 1371 | Much blue grass and timothy; considerable red and white clover; from dry upland; plowed 40 years; cut first week in July. *a k* | 14.30 | 5.10 | 10.60 | 24.90 | 42.40 | 2.70 | 6.0 | 12.4 | 29.1 | 49.3 | 3.2 | do | 1371 |
| 1372 | Yellow clover and timothy, with some redtop and wire grass (*Poa compressa*); cut July 1. *a k* | 14.30 | 4.74 | 9.06 | 28.19 | 42.21 | 1.50 | 5.5 | 10.6 | 32.9 | 49.2 | 1.8 | do | 1372 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1373 | Chiefly timothy and redtop; some red clover and white weed (*Chrysanthemum Leucanthemum*); cut Aug. 1. *a k* | 14.30 | 5.10 | 9.00 | 24.90 | 44.90 | 1.80 | 6.0 | 10.5 | 29.1 | 52.3 | 2.1 | ....do | 1373 |
| 1374 | Timothy, clover, redtop, and bushes, baled | 15.95 | 3.93 | 6.20 | 26.60 | 45.13 | 2.19 | 4.6 | 7.4 | 31.6 | 53.8 | 2.6 | Conn. State Ex. Sta. Rep., 1886, p. 113 | 1374 |
| 1375 | Coarse in quality | 15.11 | 3.17 | 6.44 | 29.77 | 43.73 | 1.78 | 3.8 | 7.5 | 35.1 | 51.5 | 2.1 | Conn. State Ex. Sta. Rep., 1887, p. 100 | 1375 |
| 1376 | Rowen of mixed grasses and clovers | 14.53 | 6.30 | 11.80 | 28.22 | 35.84 | 3.31 | 7.4 | 13.8 | 33.0 | 41.9 | 3.9 | N. Y. State Ex. Sta. Rep., 1884, p. 330 | 1376 |
| 1377 | Rowen of mixed grasses and clovers; not as much clover as preceding. | 14.13 | 6.16 | 10.36 | 29.38 | 36.88 | 3.09 | 7.2 | 12.1 | 34.2 | 42.9 | 3.6 | ....do | 1377 |
| 1378 | Same as No. 1376, but exposed to weather 1 month; average sample. *k* | 14.53 | 4.15 | 10.42 | 35.14 | 33.28 | 2.48 | 4.8 | 12.2 | 41.1 | 39.0 | 2.9 | N. Y. State Ex. Sta. Rep., 1885, p. 303 | 1378 |
| 1379 | Same as No. 1376, but exposed to weather 1 month; poorest sample. *k* | 14.53 | 4.64 | 11.73 | 34.79 | 31.79 | 2.52 | 5.4 | 13.9 | 40.7 | 37.0 | 3.0 | ....do | 1379 |
| 1380 | Rowen, contained much clover. *c* | 8.84 | 9.57 | 12.03 | 26.86 | 39.92 | 2.78 | 10.5 | 13.2 | 29.5 | 43.7 | 3.1 | Mass. State Ex. Sta. Rep., 1887, p. 95 | 1380 |
| 1381 | Vetch (*Vicia sativa*) and oats (*Avena sativa*) | 9.75 | 7.11 | 15.50 | 17.20 | 46.39 | 4.05 | 7.9 | 17.2 | 19.0 | 51.4 | 4.5 | Mass. State Ex. Sta. Rep., 1884, p. 93 | 1381 |
| | UPLAND HAY. | | | | | | | | | | | | | |
| | Upland hay: | | | | | | | | | | | | | |
| 1382 | Time of cutting unknown | 11.35 | 5.68 | 6.79 | 27.22 | 46.93 | 2.03 | 6.4 | 7.7 | 30.7 | 52.9 | 2.3 | Mass. State Ex. Sta. Rep., 1885, p. 98 | 1382 |
| 1383 | Do | 10.60 | 6.78 | 8.34 | 24.34 | 47.46 | 2.48 | 7.6 | 9.3 | 27.2 | 53.1 | 2.8 | Mass. State Ex. Sta. Rep., 1885, p. 99 | 1383 |
| 1384 | Do | 16.04 | 3.79 | 4.83 | 26.28 | 46.88 | 2.18 | 4.5 | 5.8 | 31.3 | 55.8 | 2.6 | N. Y. State Ex. Sta. Rep., 1886, p. 365 | 1384 |
| 1385 | Do | 19.00 | 4.49 | 6.52 | 23.72 | 44.92 | 1.35 | 5.5 | 8.0 | 29.2 | 55.6 | 1.7 | Wis. Ex. Sta. Rep., 1886, p. 99 | 1385 |
| 1386 | Do | 6.48 | 2.08 | 8.23 | 35.85 | 44.30 | 3.06 | 2.2 | 8.8 | 38.3 | 47.4 | 3.3 | Vt. Ex. Sta. Rep., 1887, p. 138 | 1386 |
| 1387 | Do* | 13.89 | 5.52 | 9.84 | 27.40 | 41.86 | 2.49 | 6.4 | 11.4 | 31.7 | 47.6 | 2.9 | Ark. Ex. Sta. Rep., 1888, p. 132 | 1387 |
| 1388 | Do | 8.06 | 6.16 | 9.29 | 31.10 | 43.56 | 1.83 | 6.7 | 10.1 | 33.8 | 47.4 | 2.0 | Mass. State Ex. Sta. Rep., 1889, p. 32 | 1388 |
| 1389 | Do | 11.84 | 6.86 | 6.06 | 35.75 | 37.91 | 1.58 | 7.8 | 6.9 | 40.6 | 42.9 | 1.8 | Miss. Ex. Sta. Bul. 8, 1889 | 1389 |
| 1390 | Cut July 10; early cut hay | 12.10 | 3.59 | 7.19 | 25.70 | 49.14 | 2.28 | 4.1 | 8.2 | 29.2 | 55.9 | 2.6 | N. H. Ex. Sta. Bul. 8, 1889 | 1390 |
| 1391 | Cut July 31; late-cut hay | 8.63 | 4.34 | 7.18 | 26.56 | 50.83 | 2.56 | 4.7 | 7.8 | 29.1 | 55.6 | 2.8 | ....do | 1391 |
| 1392 | Rowen, sun-dried; analysis No. 711 is same rowen after being in silo 11 months. | 19.71 | 7.22 | 11.80 | 23.63 | 33.66 | 3.98 | 9.0 | 14.7 | 29.4 | 41.9 | 5.0 | Mass. State Ex. Sta. Rep., 1886, p. 66 | 1392 |
| 1393 | Rowen | 10.95 | 5.79 | 12.64 | 28.04 | 38.13 | 4.45 | 6.5 | 14.2 | 31.5 | 42.8 | 5.0 | Mass. Ex. Sta. Rep., 1889, p. 35 | 1393 |
| | SWAMP HAY. | | | | | | | | | | | | | |
| | Swamp hay: | | | | | | | | | | | | | |
| 1394 | Time of cutting unknown | 14.30 | 3.30 | 7.80 | 31.60 | 39.90 | 3.10 | 3.9 | 9.1 | 36.9 | 46.5 | 3.6 | Conn. Bd. Agr Rep., 1872, p. 422 | 1394 |
| 1395 | Chiefly *Carex stricta, C. stellulata*, var. *scirpoides, Eleocharis tenuis. k* | 14.30 | 5.40 | 6.70 | 26.20 | 46.10 | 1.30 | 6.3 | 7.8 | 30.6 | 53.8 | 1.5 | Conn. State Ex. Sta. Rep., 1879, p. 80 | 1395 |
| 1396 | Cut Aug. 15, 1877 *k* | 14.30 | 8.56 | 7.27 | 23.22 | 44.49 | 2.16 | 10.0 | 8.5 | 27.1 | 51.9 | 2.5 | ....do | 1396 |
| 1397 | Cut Aug. 7 to 14, 1877 *k* | 7.83 | 12.11 | 8.81 | 23.58 | 45.67 | 2.00 | 13.1 | 9.5 | 25.6 | 49.6 | 2.2 | N. J. Ex. Sta. Rep., 1886, p. 164 | 1397 |
| 1398 | Bog hay *b* | 8.33 | 4.54 | 6.51 | 26.66 | 51.67 | 2.29 | 4.9 | 7.1 | 29.1 | 56.4 | 2.5 | ....do | 1398 |
| 1399 | From a cranberry bog *b* | 17.92 | 9.63 | 5.03 | 19.37 | 47.24 | 0.81 | 11.8 | 6.1 | 23.6 | 57.5 | 1.0 | S. C. Ex. Sta. Rep., 1888, p. 134 | 1399 |
| 1400 | Marsh hay *a c* | 7.86 | 4.20 | 7.00 | 27.55 | 49.97 | 3.60 | 4.6 | 7.6 | 29.9 | 54.0 | 3.9 | Mich. Ex. Sta. Bul. 49, 1889 | 1400 |
| 1401 | Do | 8.01 | 6.16 | 8.74 | 32.75 | 42.60 | 1.74 | 6.7 | 9.5 | 35.6 | 46.3 | 1.9 | Mass. State Ex. Sta. Rep., 1889, p. 142 | 1401 |
| | Low meadow hay | | | | | | | | | | | | | |
| | SALT MARSH HAY. | | | | | | | | | | | | | |
| | Salt marsh hay: | | | | | | | | | | | | | |
| 1402 | Cut 1872; contained spike grass (*Brizopyrum spicatum*), rush salt grass (*Spartina juncea*) and spear grass (*Glyceria maritima*). | 7.93 | 6.29 | 7.09 | 31.40 | 44.39 | 2.90 | 6.8 | 7.7 | 34.1 | 48.3 | 3.1 | Bussey Inst. Bul., 1874–'76, p. 341 | 1402 |

* Adds 101 (fresh or air-dry material).

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **HAY AND OTHER DRIED COARSE FODDERS—Continued.** | | | | | | | | | | | | | |
| | SALT MARSH HAY—continued. | | | | | | | | | | | | | |
| | Salt marsh hay—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 1403 | Cut 1874; mostly spike grass and black grass (*Juncus gerardi*). | 8.91 | 7.79 | 7.53 | 32.90 | 39.73 | 3.14 | 8.5 | 8.3 | 36.1 | 43.7 | 3.4 | Bussey Inst. Bul., 1874–'76, p. 341 | 1403 |
| 1404 | Cut 1874; mostly spike grass and sea spear grass. | 7.84 | 7.10 | 7.79 | 33.84 | 40.66 | 2.77 | 7.5 | 8.2 | 36.7 | 44.6 | 3.0 | do | 1404 |
| 1405 | Cut 1874; mostly rush salt grass with a little spike grass. | 8.70 | 7.51 | 4.88 | 28.71 | 48.52 | 1.68 | 8.1 | 5.4 | 31.5 | 53.1 | 1.9 | do | 1405 |
| 1406 | Cut 1874; almost entirely rush salt grass (*Spartina juncea*). | 8.61 | 5.97 | 4.38 | 37.91 | 41.30 | 1.83 | 6.6 | 4.8 | 41.5 | 45.1 | 2.0 | do | 1406 |
| 1407 | Cut 1872; no seed or flowers; almost entirely salt marsh grass (*Spartina stricta*, var *alterniflora*). | 11.70 | 9.84 | 4.33 | 30.54 | 41.30 | 2.29 | 11.2 | 4.8 | 34.6 | 46.8 | 2.6 | Bussey Inst. Bul., 1874–'76, p. 342 | 1407 |
| 1408 | Cut 1874, similar to preceding | 17.47 | 9.56 | 5.55 | 30.01 | 35.15 | 2.26 | 11.6 | 6.8 | 36.3 | 42.5 | 2.8 | do | 1408 |
| 1409 | Cut 1874; considerable sand adhering | 18.61 | 11.81 | 5.38 | 27.64 | 34.07 | 2.49 | 14.5 | 6.6 | 34.0 | 41.9 | 3.0 | do | 1409 |
| | Particulars unknown | 8.00 | 5.39 | 4.31 | 27.00 | 53.67 | 1.63 | 5.9 | 4.7 | 29.4 | 58.3 | 1.7 | N. J. Ex. Sta. Rep., 1882, p. 70 | |
| 1410 | Do. *b* | 8.16 | 7.14 | 5.13 | 25.08 | 52.38 | 2.11 | 7.8 | 5.6 | 27.3 | 57.0 | 2.3 | N. J. Ex. Sta. Rep., 1886, p. 164 | 1410 |
| 1411 | Do. *b* | 8.06 | 5.93 | 4.00 | 25.27 | 54.32 | 2.42 | 6.4 | 4.4 | 27.5 | 59.1 | 2.6 | do | 1411 |
| 1412 | Creek sedge *b* | 49.01 | 5.44 | 1.20 | 14.41 | 29.32 | 0.62 | 10.7 | 2.3 | 28.3 | 57.6 | 1.1 | do | 1412 |
| 1413 | Do. *b* | 34.60 | 7.77 | 2.70 | 17.88 | 35.52 | 1.53 | 12.0 | 4.1 | 27.3 | 54.3 | 2.3 | do | 1413 |
| 1414 | | | | | | | | | | | | | | 1414 |
| | STRAW. | | | | | | | | | | | | | |
| | Wheat straw : | | | | | | | | | | | | | |
| 1415 | Particulars unknown | 6.50 | 6.96 | 4.98 | 38.08 | 41.99 | 1.49 | 7.4 | 5.3 | 40.7 | 45.0 | 1.6 | Mass. State Ex. Sta. Rep., 1884; p. 108. | 1415 |
| 1416 | Do | 17.86 | 4.16 | 2.98 | 42.74 | 31.04 | 1.22 | 5.1 | 3.6 | 52.1 | 37.7 | 1.5 | N. Y. State Ex. Sta. Rep., 1886, p. 365. | 1416 |
| 1417 | Do. *b* | 6.78 | 3.33 | 3.00 | 36.70 | 49.34 | 0.84 | 3.6 | 3.2 | 39.4 | 52.9 | 0.9 | N. J. Ex. Sta. Rep., 1886, p. 162 | 1417 |
| 1418 | Do. *b* | 6.84 | 4.12 | 3.19 | 37.62 | 47.42 | 0.81 | 4.4 | 3.4 | 40.4 | 50.9 | 0.9 | do | 1418 |
| 1419 | Do. *b* | 7.62 | 3.03 | 3.63 | 34.30 | 49.59 | 1.82 | 3.2 | 3.9 | 37.1 | 53.9 | 1.9 | do | 1419 |
| 1420 | Do. *b* | 7.07 | 3.34 | 2.94 | 34.51 | 50.56 | 1.58 | 3.6 | 3.2 | 37.1 | 54.4 | 1.7 | do | 1420 |
| 1421 | Do | 14.10 | 4.30 | 3.22 | 42.50 | 34.48 | 1.38 | 5.0 | 3.7 | 49.5 | 40.2 | 1.6 | Ark. Ex. Sta. Rep., 1888, p. 132 | 1421 |
| | Maximum | 17.86 | 6.96 | 4.98 | 42.74 | 50.56 | 1.82 | 7.4 | 5.3 | 52.1 | 54.4 | 1.9 | | |
| | Minimum | 6.50 | 3.03 | 2.94 | 34.30 | 31.04 | 0.81 | 3.2 | 3.2 | 37.1 | 37.7 | 0.9 | | |
| | Average | **9.55** | **4.18** | **3.42** | **38.06** | **43.49** | **1.30** | **4.6** | **3.8** | **42.1** | **48.1** | **1.4** | | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Rye straw: | | | | | | | | | | | | | |
| 1422 | Raised on heavy loam *k* | 12.50 | 8.03 | 6.89 | 34.20 | 35.70 | 2.68 | 9.2 | 7.9 | 39.1 | 40.8 | 3.0 | Conn. State (Middletown) Ex. Sta. Rep., 1877–'78, p. 37. | 1422 |
| 1423 | Particulars unknown | 9.73 | 2.75 | 2.19 | 43.29 | 41.04 | 1.00 | 3.1 | 2.4 | 47.9 | 45.5 | 1.1 | Conn. State Ex. Sta. Rep., 1884, p. 109. | 1423 |
| 1424 | Do. *b* | 6.30 | 3.60 | 2.75 | 41.52 | 44.54 | 1.29 | 3.9 | 3.0 | 44.3 | 47.4 | 1.4 | N. J. Ex. Sta. Rep., 1886, p. 162 | 1424 |
| 1425 | Do. *b* | 6.51 | 3.12 | 3.63 | 32.70 | 52.88 | 1.16 | 3.4 | 3.9 | 35.9 | 55.5 | 1.3 | do | 1425 |
| 1426 | Do. *b* | 7.15 | 3.31 | 3.19 | 38.32 | 46.88 | 1.15 | 3.6 | 3.5 | 41.4 | 50.2 | 1.3 | do | 1426 |
| 1427 | Do. *b* | 6.32 | 2.93 | 3.19 | 36.73 | 49.25 | 1.58 | 3.2 | 3.5 | 39.2 | 52.5 | 1.6 | do | 1427 |
| 1428 | Do. *b* | 6.80 | 3.14 | 2.88 | 39.46 | 46.57 | 1.15 | 3.4 | 3.2 | 42.3 | 49.9 | 1.2 | do | 1428 |
| 1429 | Do. *b* | 6.78 | 3.37 | 3.00 | 40.58 | 45.07 | 1.20 | 3.7 | 3.3 | 43.5 | 48.2 | 1.3 | do | 1429 |
| | All analyses, excluding No. 1422. Maximum | 9.73 | 3.60 | 3.63 | 43.29 | 52.88 | 1.58 | 3.9 | 3.9 | 47.9 | 55.5 | 1.6 | | |
| | All analyses, excluding No. 1422. Minimum | 6.30 | 2.75 | 2.19 | 32.70 | 41.04 | 1.00 | 3.1 | 2.4 | 35.9 | 45.5 | 1.1 | | |
| | All analyses, excluding No. 1422. Average | **7.08** | **3.17** | **2.98** | **38.94** | **46.61** | **1.22** | **3.4** | **3.2** | **41.9** | **50.2** | **1.3** | | |
| | Oat straw: | | | | | | | | | | | | | |
| 1430 | From oats No. 2 *k* | 12.50 | 1.81 | 2.30 | 55.96 | 26.42 | 1.01 | 2.1 | 2.6 | 69.0 | 30.1 | 1.2 | Conn. State (Middletown) Ex. Sta. Rep., 1877–'78, p. 37. | 1430 |
| 1431 | Particulars unknown | 6.53 | 5.77 | 5.08 | 35.21 | 44.26 | 3.15 | 6.2 | 5.4 | 37.6 | 47.4 | 3.4 | U. S. Dept. Ag. Rep., 1881–'82, p. 553 | 1431 |
| 1432 | Do | 11.29 | 6.57 | 2.66 | 37.19 | 40.22 | 2.07 | 7.4 | 3.0 | 41.9 | 45.3 | 2.4 | N. Y. Cornell Ex. Sta. Rep., 1882 '83, p. 41. | 1432 |
| 1433 | Do | 8.15 | 6.65 | 4.00 | 45.09 | 33.54 | 2.57 | 7.3 | 4.4 | 49.1 | 36.4 | 2.8 | Ohio Ex. Sta. Rep., 1885, p. 235 | 1433 |
| 1434 | From white oats *b* | 11.42 | 4.76 | 6.88 | 31.82 | 42.39 | 2.73 | 5.4 | 7.7 | 35.9 | 48.0 | 3.0 | N. J. Ex. Sta. Rep., 1886, p. 162 | 1434 |
| 1435 | From barley oats *b* | 7.41 | 5.28 | 3.19 | 36.66 | 45.55 | 1.91 | 5.7 | 3.5 | 39.6 | 49.1 | 2.1 | do | 1435 |
| 1436 | Particulars unknown *b* | 7.95 | 4.65 | 3.19 | 40.23 | 42.18 | 1.80 | 5.0 | 3.5 | 43.6 | 45.9 | 2.0 | do | 1436 |
| 1437 | Do. *b* | 7.64 | 4.26 | 5.00 | 29.52 | 51.41 | 2.17 | 4.7 | 5.4 | 31.9 | 55.6 | 2.4 | do | 1437 |
| 1438 | Do. *b* | 7.64 | 5.05 | 3.88 | 38.44 | 42.71 | 2.28 | 5.4 | 4.2 | 41.6 | 46.3 | 2.5 | do | 1438 |
| 1439 | Do. *b* | 7.13 | 5.20 | 3.06 | 35.82 | 46.59 | 2.20 | 5.7 | 3.3 | 38.6 | 50.0 | 2.4 | do | 1439 |
| 1440 | Do. *b* | 7.26 | 4.06 | 3.06 | 41.80 | 42.10 | 1.72 | 4.4 | 3.3 | 45.0 | 45.5 | 1.8 | do | 1440 |
| 1441 | Do | 10.00 | 3.67 | 3.56 | 37.77 | 41.96 | 3.04 | 4.1 | 4.0 | 41.9 | 46.6 | 3.4 | Me. Ex. Sta. Rep., 1886–'87, p. 68 | 1441 |
| 1442 | Do. *a* | 18.27 | 5.66 | 3.78 | 34.74 | 35.37 | 2.15 | 6.9 | 4.6 | 42.5 | 43.3 | 2.7 | N. Y. State Ex. Sta. Rep., 1888, p. 238. | 1442 |
| | All analyses, excluding No. 1430. Maximum | 18.27 | 6.65 | 6.88 | 45.09 | 51.41 | 3.15 | 7.4 | 7.7 | 49.1 | 55.6 | 3.4 | | |
| | All analyses, excluding No. 1430. Minimum | 6.53 | 3.67 | 2.66 | 31.82 | 33.54 | 1.72 | 4.1 | 3.0 | 31.9 | 36.4 | 1.8 | | |
| | All analyses, excluding No. 1430. Average | **9.22** | **5.13** | **3.95** | **37.03** | **42.36** | **2.31** | **5.6** | **4.4** | **40.7** | **46.8** | **2.5** | | |
| 1443 | Buckwheat straw | 10.35 | 4.94 | 4.38 | 46.83 | 32.08 | 1.42 | 5.5 | 4.9 | 52.3 | 35.7 | 1.6 | Bussey Inst. Bul., 1877, p. 54 | 1443 |
| 1444 | Do | 10.39 | 5.16 | 3.33 | 44.93 | 34.49 | 1.70 | 5.8 | 3.7 | 50.1 | 38.5 | 1.9 | do | 1444 |
| 1445 | Do. *b* | 9.00 | 6.51 | 7.75 | 37.16 | 38.93 | 0.65 | 7.1 | 8.6 | 40.9 | 42.7 | 0.7 | N. J. Ex. Sta. Rep., 1886, p. 164 | 1445 |
| | Average | **9.91** | **5.53** | **5.15** | **42.97** | **35.19** | **1.25** | **6.1** | **5.8** | **47.7** | **39.0** | **1.4** | | |
| 1446 | Hungarian grass straw *b* | 10.98 | 6.38 | 2.75 | 32.18 | 46.81 | 0.90 | 7.2 | 3.1 | 36.2 | 52.6 | 0.9 | N. J. Ex. Sta. Rep., 1886, p. 164 | 1446 |
| 1447 | Cut when ripe; after threshing one fourth of the seed remained in the straw. | 14.22 | 3.65 | 2.55 | 45.87 | 32.77 | 0.94 | 4.3 | 3.0 | 53.4 | 38.2 | 1.1 | Ky. Ex. Sta. Bul. 5, 1886 | 1447 |
| | Average | **12.60** | **5.01** | **2.65** | **39.02** | **39.80** | **0.92** | **5.7** | **3.1** | **44.6** | **45.6** | **1.0** | | |
| 1448 | Orchard grass straw *b* | 6.88 | 3.93 | 3.63 | 36.47 | 47.73 | 1.36 | 4.2 | 3.9 | 39.2 | 51.2 | 1.5 | N. J. Ex. Sta. Rep., 1886, p. 160 | 1448 |

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | HAY AND OTHER DRIED COARSE FODDERS—Continued. | | | | | | | | | | | | | |
| | STRAW—continued. | | | | | | | | | | | | | |
| | | % | % | % | % | % | % | % | % | % | % | % | | |
| 1449 | Rice straw | 3.66 | 10.71 | 4.68 | 28.31 | 50.90 | 1.74 | 11.1 | 4.9 | 29.5 | 52.7 | 1.8 | N. C. Ex. Sta. Rep., 1882, p. 91 | 1449 |
| 1450 | Do. *a* | 8.97 | 19.97 | 4.72 | 32.25 | 32.20 | 1.87 | 21.9 | 5.2 | 35.4 | 35.4 | 2.1 | La. Ex. Sta. Bul. 24, p. 389 | 1450 |
| | Average | **6.32** | **15.34** | **4.70** | **30.28** | **41.55** | **1.81** | **16.5** | **5.1** | **32.4** | **44.0** | **2.0** | | |
| | ROOTS, BULBS, TUBERS, AND OTHER VEGETABLES. | | | | | | | | | | | | | |
| | Potatoes: | | | | | | | | | | | | | |
| 1451 | Norfolk, from Washington market *a* | 77.61 | 0.96 | 1.32 | 0.28 | 19.69 | 0.14 | 4.3 | 5.9 | 1.2 | 88.0 | 0.6 | U. S. Dept. Agr. Rep., 1883, p. 234 | 1451 |
| 1452 | Early Rose, from Washington market *a* | 79.69 | 0.82 | 1.14 | 0.48 | 17.75 | 0.12 | 4.0 | 5.6 | 2.4 | 87.4 | 0.6 | do | 1452 |
| 1453 | Small size | 78.88 | 0.89 | 2.28 | 0.61 | 17.27 | 0.07 | 4.2 | 10.8 | 2.9 | 81.8 | 0.3 | N. Y. State Ex. Sta. Rep., 1884, p. 333 | 1453 |
| 1454 | Large size | 76.20 | 0.78 | 2.50 | 0.59 | 19.91 | 0.02 | 3.3 | 10.5 | 2.5 | 83.6 | 0.1 | do | 1454 |
| 1455 | Small size | 80.39 | 0.85 | 2.50 | 0.85 | 15.33 | 0.08 | 4.3 | 12.8 | 4.3 | 78.2 | 0.4 | do | 1455 |
| 1456 | Beauty of Hebron, planted Apr. 27; harvested Aug. 26; more or less scabby. | 78.05 | 1.02 | 2.98 | 0.43 | 17.34 | 0.18 | 4.6 | 13.5 | 2.0 | 79.1 | 0.8 | Mass. State Ex. Sta. Rep., 1885, p. 74 | 1456 |
| 1457 | Raw | 75.90 | 0.82 | 2.62 | 0.55 | 19.98 | 0.13 | 3.4 | 10.9 | 2.3 | 82.9 | 0.5 | Me. Ex. Sta. Rep., 1886–'87, p. 68 | 1457 |
| 1458 | Steamed; same as the preceding, except cooked by steaming. | 75.37 | 0.88 | 2.62 | 0.68 | 20.37 | 0.07 | 3.6 | 10.7 | 2.8 | 82.6 | 0.3 | do | 1458 |
| 1459 | Polaris *a* | 80.20 | 1.03 | 2.13 | 0.38 | 16.15 | 0.11 | 5.2 | 10.7 | 1.9 | 81.6 | 0.6 | Mass. State Ex. Sta. Rep., 1889, p. 185 | 1459 |
| 1460 | Beauty of Hebron *a* | 80.73 | 1.00 | 1.84 | 0.63 | 15.69 | 0.11 | 5.2 | 9.6 | 3.3 | 81.4 | 0.5 | do | 1460 |
| 1461 | Do. *a* | 81.53 | 1.16 | 1.80 | 0.60 | 14.82 | 0.09 | 6.3 | 9.7 | 3.2 | 80.3 | 0.5 | do | 1461 |
| 1462 | Beauty of Hebron, scabby *a* | 82.15 | 1.14 | 1.92 | 0.64 | 14.05 | 0.10 | 6.4 | 10.7 | 3.5 | 78.8 | 0.6 | do | 1462 |
| | All analyses—Maximum | 82.15 | 1.16 | 2.98 | 0.85 | 20.37 | 0.18 | 6.4 | 13.5 | 4.3 | 88.0 | 0.8 | | |
| | All analyses—Minimum | 75.37 | 0.78 | 1.14 | 0.28 | 14.05 | 0.02 | 3.3 | 5.6 | 1.2 | 78.2 | 0.1 | | |
| | All analyses—Average | **78.89** | **0.95** | **2.14** | **0.56** | **17.36** | **0.10** | **4.5** | **10.1** | **2.7** | **82.2** | **0.5** | | |
| | Sweet potatoes: | | | | | | | | | | | | | |
| 1463 | Variety unknown | 65.96 | 1.07 | 0.45 | 2.50 | 29.72 | 0.30 | 3.1 | 1.3 | 7.4 | 87.3 | 0.9 | U. S. Dept. Agr. Rep., 1869, p. 76 | 1463 |
| 1464 | Nansemond Improved | 73.39 | 1.07 | 1.28 | 0.98 | 23.00 | 0.28 | 4.0 | 4.8 | 3.7 | 86.4 | 1.1 | Am. Jour. Sci. and Arts, 1877, p. 197 | 1464 |
| 1465 | Variety unknown | 71.51 | 0.66 | 1.20 | 0.60 | 25.67 | 0.36 | 2.3 | 4.2 | 2.1 | 90.1 | 1.3 | U. S. Dept. Agr. Rep., 1883, p. 235 | 1465 |
| 1466 | Do | 74.38 | 1.34 | 3.56 | 2.14 | 17.98 | 0.60 | 5.2 | 13.9 | 8.4 | 70.2 | 2.3 | N. Y. State Ex. Sta. Rep., 1886, p. 365 | 1466 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1467 | Do. *b* | 67.90 | 0.82 | 1.28 | 0.60 | 29.04 | 0.36 | 2.5 | 3.2 | 1.9 | 91.2 | 1.2 | N. J. Ex. Sta. Rep., 1886, p. 164 | 1467 |
| 1468 | Georgia Bucks *a* | 73.31 | 1.18 | 1.20 | 0.77 | 23.24 | 0.30 | 4.2 | 4.3 | 2.9 | 87.5 | 1.1 | S. C. Ex. Sta. Rep., 1888, p. 134 | 1468 |
| | All analyses. Maximum | 74.38 | 1.34 | 3.56 | 2.50 | 29.72 | 0.60 | 5.2 | 13.9 | 8.4 | 91.2 | 2.3 | | |
| | All analyses. Minimum | 65.96 | 0.66 | 0.45 | 0.60 | 17.98 | 0.28 | 2.3 | 1.3 | 1.9 | 70.2 | 0.9 | | |
| | All analyses. Average | **71.07** | **1.02** | **1.49** | **1.27** | **24.78** | **0.37** | **3.5** | **5.2** | **3.6** | **86.3** | **1.4** | | |
| | Red beets: | | | | | | | | | | | | | |
| 1469 | Variety unknown *a* | 87.68 | 1.05 | 1.73 | 1.69 | 7.64 | 0.21 | 8.7 | 14.0 | 13.6 | 62.0 | 1.7 | U. S. Dept. Agr. Rep., 1881–'82, p. 555 | 1469 |
| | Dewing Blood Turnip, collected— | | | | | | | | | | | | | |
| 1470 | June 9; average weight of one, 2 grams. *a* | 87.04 | 1.58 | 1.79 | 1.00 | 8.27 | 0.32 | 12.2 | 13.8 | 7.7 | 63.8 | 2.5 | U. S. Dept. Agr. Rep., 1883, p. 238 | 1470 |
| 1471 | June 19; length, 9 cm.; average weight of one, 6.4 grams. *a* | 86.80 | 1.24 | 0.78 | 0.77 | 10.19 | 0.22 | 9.4 | 5.9 | 5.8 | 77.2 | 1.7 | do | 1471 |
| 1472 | June 26; length, 5.2 cm.; average weight of one, 21.7 grams. *a* | 83.40 | 1.22 | 1.48 | 0.88 | 12.69 | 0.33 | 7.4 | 8.9 | 5.3 | 76.4 | 2.0 | do | 1472 |
| 1473 | July 3; breadth, 5.4 cm.; average weight of one, 64.5 grams. *a* | 86.69 | 0.96 | 0.93 | 0.89 | 10.35 | 0.18 | 7.2 | 7.0 | 6.7 | 77.8 | 1.3 | do | 1473 |
| 1474 | July 10; breadth, 6.5 cm.; average weight of one, 95 grams. *a* | 87.80 | 0.95 | 1.47 | 0.69 | 8.95 | 0.14 | 7.8 | 12.0 | 5.7 | 73.4 | 1.1 | do | 1474 |
| 1475 | July 24; breadth, 6.5 cm.; average weight of one, 49.3 grams. *a* | 83.03 | 1.18 | 1.88 | 0.75 | 12.98 | 0.18 | 6.3 | 11.1 | 4.4 | 77.1 | 1.1 | do | 1475 |
| 1476 | Aug. 15; length, 4 cm.; breadth, 5.4 cm.; average weight of one, 74 grams. *a* | 85.33 | 1.16 | 1.66 | 0.72 | 11.03 | 0.10 | 7.9 | 11.3 | 4.9 | 75.2 | 0.7 | do | 1476 |
| 1477 | Oct. 25; breadth, 6.5 cm.; average weight of one, 130 grams. *a* | 89.46 | 1.12 | 1.48 | 0.64 | 7.16 | 0.14 | 10.6 | 14.0 | 6.1 | 67.9 | 1.4 | do | 1477 |
| 1478 | Norbiton Red | 92.16 | 1.17 | 1.56 | 1.07 | 3.84 | 0.20 | 14.9 | 19.9 | 13.6 | 49.1 | 2.5 | Vt. Ex. Sta. Rep., 1888, p. 76 | 1478 |
| 1479 | Red Globe, sown May 25, collected Nov. 1; weight of the 3 analyzed (largest, smallest, and medium), 1.13 lbs. *a c* | 86.95 | 1.38 | 1.58 | 0.61 | 9.26 | 0.23 | 10.6 | 12.1 | 4.5 | 71.0 | 1.8 | Mass. State Ex. Sta. Rep., 1888, p. 143 | 1479 |
| 1480 | Egyptian Turnip, sown May 25, collected Nov. 1; weight of the 3 analyzed (largest, smallest, and medium), 1.13 lbs. *a c* | 85.80 | 0.82 | 1.11 | 0.89 | 11.26 | 0.12 | 5.8 | 7.8 | 6.2 | 79.4 | 0.8 | do | 1480 |
| 1481 | Long Smooth Red, sown May 25, collected Nov. 1; weight of the 3 analyzed (largest, smallest, and medium), 1.62 lbs. *a c* | 85.49 | 1.30 | 1.72 | 0.79 | 10.59 | 0.11 | 9.0 | 11.8 | 5.5 | 72.9 | 0.8 | do | 1481 |
| 1482 | New Market Gardener *c* | 89.65 | 0.74 | 1.47 | 0.78 | 7.30 | 0.06 | 7.2 | 14.3 | 7.6 | 70.3 | 0.6 | Mass. State Ex. Sta. Rep., 1889, p. 184 | 1482 |
| 1483 | Eclipse *c* | 90.25 | 0.86 | 1.51 | 0.71 | 6.50 | 0.07 | 9.8 | 15.4 | 7.2 | 66.9 | 0.7 | do | 1483 |
| 1484 | Osborne Selected *c* | 88.80 | 0.88 | 1.62 | 0.75 | 7.88 | 0.07 | 7.9 | 14.5 | 6.7 | 70.3 | 0.6 | do | 1484 |
| | Analyses Nos. 1469, 1478–1484. Maximum | 92.16 | 1.38 | 1.73 | 1.69 | 11.26 | 0.23 | 14.9 | 19.9 | 13.6 | 79.4 | 2.5 | | |
| | Analyses Nos. 1469, 1478–1484. Minimum | 85.49 | 0.74 | 1.11 | 0.61 | 3.84 | 0.06 | 5.8 | 7.8 | 4.5 | 49.1 | 0.6 | | |
| | Analyses Nos. 1469, 1478–1484. Average | **88.47** | **1.04** | **1.53** | **0.88** | **7.94** | **0.14** | **9.1** | **13.4** | **7.8** | **68.4** | **1.3** | | |
| | Sugar beets: | | | | | | | | | | | | | |
| 1485 | French Imperial | 84.42 | 1.13 | 1.69 | 0.93 | 11.75 | 0.08 | 7.3 | 10.8 | 6.0 | 75.4 | 0.5 | Conn. State Ex. Sta. Rep., 1884, p. 107 | 1485 |
| 1486 | Lane Imperial | 87.24 | 0.93 | 1.76 | 0.88 | 9.13 | 0.06 | 7.3 | 13.7 | 6.8 | 71.7 | 0.5 | Ohio Ex. Sta. Rep., 1884, p. 106 | 1486 |
| 1487 | Golden Globe | 89.78 | 0.93 | 1.78 | 0.78 | 6.68 | 0.05 | 9.0 | 17.4 | 7.6 | 65.5 | 0.5 | Ohio Ex. Sta. Rep., 1884, p. 212 | 1487 |

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | ROOTS, BULBS, TUBERS, AND OTHER VEGETABLES—Continued. | | | | | | | | | | | | | |
| | Sugar beets—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 1488 | Golden Tankard | 90.76 | 0.92 | 1.89 | 0.71 | 5.67 | 0.05 | 10.0 | 20.4 | 7.7 | 61.4 | 0.5 | Ohio Ex. Sta. Rep., 1884, p. 212 | 1488 |
| 1489 | Vilmorin; weight of root below leaf mark, 1 lb., 3¾ oz. *e* | 84.25 | 0.73 | 2.05 | 1.10 | 11.77 | 0.10 | 4.7 | 13.0 | 7.0 | 74.7 | 0.6 | Mass. State Ex. Sta. Rep., 1885, p. 78 | 1489 |
| 1490 | Vilmorin; weight of root below leaf mark, 10 oz. *e* | 83.55 | 0.74 | 1.67 | 1.11 | 12.81 | 0.12 | 4.5 | 10.1 | 6.8 | 77.9 | 0.7 | ....do | 1490 |
| 1491 | Vilmorin; weight of root below leaf mark, 15½ oz. *e* | 80.47 | 0.75 | 3.15 | 1.26 | 14.25 | 0.12 | 3.9 | 16.1 | 6.4 | 73.0 | 0.6 | ....do | 1491 |
| 1492 | Vilmorin; weight of root below leaf mark, 12⅝ oz. *e* | 85.99 | 0.60 | 2.21 | 0.81 | 10.31 | 0.08 | 4.3 | 15.8 | 5.8 | 73.5 | 0.6 | ....do | 1492 |
| 1493 | Lane Improved; weight of root below leaf mark, 1 lb., 9¾ oz. *e* | 83.57 | 0.60 | 2.86 | 0.86 | 11.97 | 0.14 | 3.6 | 17.4 | 5.3 | 72.9 | 0.8 | ....do | 1493 |
| 1494 | Imperial *h* | 86.94 | 0.76 | 2.01 | 0.79 | 9.28 | 0.22 | 5.8 | 15.4 | 6.1 | 71.2 | 1.5 | Ohio Ex. Sta. Rep., 1886, p. 279 | 1494 |
| 1495 | Taken from pit in spring; tops sprouted | 88.77 | 1.22 | 2.04 | 0.89 | 6.99 | 0.07 | 10.9 | 18.2 | 7.9 | 62.2 | 0.8 | Ky. Ex. Sta. Bul. 5, 1886, p. 21 | 1495 |
| 1496 | Saxony; sown May 25, collected Nov. 1; weight of 3 analyzed (largest, smallest, and medium), 1.7 lbs. *a c* | 83.32 | 0.85 | 1.22 | 0.97 | 13.58 | 0.06 | 5.1 | 7.3 | 5.8 | 81.4 | 0.4 | Mass. State Ex. Sta. Rep., 1888, p. 144 | 1496 |
| 1497 | Excelsior | 87.21 | 0.83 | 1.30 | 0.79 | 9.75 | 0.12 | 6.5 | 10.2 | 6.2 | 76.1 | 1.0 | Mass. State Ex. Sta. Rep., 1889, p. 35 | 1497 |
| 1498 | Variety unknown *e* | 86.95 | 0.42 | 1.13 | 0.76 | 10.65 | 0.09 | 3.2 | 8.7 | 5.8 | 81.6 | 0.7 | Mass. State Ex. Sta. Rep., 1889, p. 183 | 1498 |
| 1499 | Do. *c e* | 90.60 | 0.95 | 1.20 | 0.73 | 6.35 | 0.17 | 10.1 | 12.8 | 7.8 | 67.5 | 1.8 | ....do | 1499 |
| 1500 | Vilmorin *c e* | 86.73 | 0.75 | 1.12 | 0.64 | 10.67 | 0.09 | 5.7 | 8.5 | 4.8 | 80.3 | 0.7 | ....do | 1500 |
| 1501 | Lane Sugar Beet *c* | 84.56 | 1.06 | 1.63 | 0.95 | 11.69 | 0.11 | 6.9 | 10.6 | 6.2 | 75.7 | 0.6 | Mass. State Ex. Sta. Rep., 1889, p. 184 | 1501 |
| 1502 | Do. *c* | 90.13 | 1.45 | 1.30 | 0.96 | 6.08 | 0.08 | 14.6 | 13.0 | 9.7 | 61.9 | 0.8 | Mass. State Ex. Sta. Rep., 1889, p. 187 | 1502 |
| 1503 | Saxony *c* | 88.38 | 1.05 | 1.16 | 0.78 | 8.56 | 0.07 | 9.1 | 10.1 | 6.7 | 73.5 | 0.6 | Mass. State Ex. Sta. Rep., 1889, p. 188 | 1503 |
| | All analyses. Maximum | 90.76 | 1.45 | 3.15 | 1.26 | 13.58 | 0.22 | 14.6 | 20.4 | 9.7 | 81.6 | 1.8 | | |
| | All analyses. Minimum | 80.47 | 0.42 | 1.12 | 0.64 | 5.67 | 0.05 | 3.2 | 7.3 | 4.8 | 61.4 | 0.4 | | |
| | All analyses. Average | **86.50** | **0.88** | **1.75** | **0.88** | **9.89** | **0.10** | **6.5** | **13.0** | **6.5** | **73.3** | **0.7** | | |
| | Mangel-wurzels: | | | | | | | | | | | | | |
| 1504 | Variety unknown *a* | 92.82 | 0.91 | 1.89 | 0.76 | 3.56 | 0.06 | 12.7 | 26.4 | 10.5 | 49.6 | 0.8 | Conn. State Ex. Sta. Rep., 1881, p. 85 | 1504 |
| 1505 | Harn *a* | 91.86 | 1.07 | 1.57 | 0.91 | 4.08 | 0.51 | 13.1 | 19.3 | 11.2 | 50.1 | 6.3 | U. S. Dept. Agr. Rep., 1881–'82, p. 553 | 1505 |
| 1506 | Yellow Globe; weight of root analyzed, 1.06 lbs. *e* | 88.27 | 0.92 | 1.51 | 0.83 | 8.39 | 0.08 | 7.8 | 12.8 | 7.1 | 71.6 | 0.7 | Mass. State Ex. Sta. Rep., 1885, p. 79 | 1506 |
| 1507 | Mammoth Large Red | 94.41 | 1.09 | 1.0[illegible] | 1.00 | 2.40 | 0.07 | 19.6 | 18.4 | 17.8 | 42.9 | 1.3 | N. Y. State Ex. Sta. Rep., 1885, p. 306 | 1507 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1508 | Large Red *h* | 89.84 | 0.82 | 1.54 | 0.78 | 6.82 | 0.20 | 7.8 | 15.3 | 7.8 | 67.1 | 2.0 | Ohio Ex. Sta. Rep., 1886, p. 279 | 1508 |
| 1509 | Giant Long Red; sown May 25; collected Nov. 1; weight of 3 analyzed (largest, smallest, and medium), 2 lbs. *a c* | 86.92 | 1.09 | 1.02 | 1.25 | 9.60 | 0.12 | 8.4 | 7.8 | 9.5 | 73.4 | 0.9 | Mass. State Ex. Sta. Rep., 1888, p. 142 | 1509 |
| 1510 | Yellow Ovoid; sown May 25, collected Nov. 1; weight of 3 analyzed (largest, smallest, and medium), 2 lbs. 3 oz. *a c* | 87.66 | 1.36 | 1.29 | 0.89 | 8.67 | 0.13 | 11.0 | 10.5 | 7.2 | 70.3 | 1.0 | do | 1510 |
| 1511 | Harn Globe | 94.34 | 1.08 | 1.22 | 0.60 | 2.65 | 0.11 | 19.1 | 21.6 | 10.6 | 46.8 | 1.9 | Vt. Ex. Sta. Rep., 1888, p. 76 | 1511 |
| 1512 | Kinver Globe | 91.52 | 1.13 | 1.41 | 0.82 | 4.90 | 0.22 | 13.3 | 16.6 | 9.7 | 57.8 | 2.6 | do | 1512 |
| | All analyses—Maximum | 94.41 | 1.36 | 1.89 | 1.25 | 8.67 | 0.51 | 19.6 | 26.4 | 17.8 | 73.4 | 6.3 | | |
| | All analyses—Minimum | 86.92 | 0.82 | 1.02 | 0.60 | 2.40 | 0.06 | 7.8 | 7.8 | 7.1 | 42.9 | 0.7 | | |
| | All analyses—Average | **90.85** | **1.05** | **1.39** | **0.87** | **5.68** | **0.16** | **11.5** | **15.2** | **9.5** | **62.1** | **1.7** | | |
| | Turnips: | | | | | | | | | | | | | |
| 1513 | Southern Prize; weight of root below leaf mark, 11¾ oz. *e* | 91.77 | 0.65 | 0.80 | 0.83 | 5.81 | 0.14 | 7.9 | 9.7 | 10.1 | 70.6 | 1.7 | Mass. State Ex. Sta. Rep., 1885, p. 79 | 1513 |
| 1514 | Flat | 92.40 | 0.72 | 1.25 | 1.20 | 4.20 | 0.23 | 9.4 | 16.5 | 15.7 | 55.3 | 3.1 | N. Y. State Ex. Sta. Rep., 1886, p. 365 | 1514 |
| 1515 | Early Yellow or Golden Stone; sown May 25; collected Nov. 1; weight of 3 analyzed (largest, medium, and smallest), 14 oz. *c* | 87.20 | 1.03 | 1.38 | 1.41 | 8.80 | 0.18 | 8.0 | 10.8 | 11.0 | 68.8 | 1.4 | Mass. State Ex. Sta. Rep., 1888, p. 145 | 1515 |
| | Average | **90.46** | **0.80** | **1.14** | **1.15** | **6.27** | **0.18** | **8.4** | **12.4** | **12.2** | **64.9** | **2.1** | | |
| | Ruta-bagas: | | | | | | | | | | | | | |
| 1516 | Variety unknown | 87.08 | 1.41 | 1.15 | 1.16 | 9.11 | 0.09 | 10.9 | 8.9 | 9.0 | 70.5 | 0.7 | Me. Agr. Col. Rep., 1878, p. 31 | 1516 |
| 1517 | White Sweet German; sown May 25, collected Nov. 1; weight of 3 analyzed (largest, smallest, and medium), 2 lbs., 2 oz. *c* | 87.23 | 1.12 | 1.32 | 1.39 | 8.79 | 0.15 | 8.8 | 10.3 | 11.0 | 68.7 | 1.2 | Mass. State Ex. Sta. Rep., 1888, p. 145 | 1517 |
| 1518 | Skirving Purple Top; sown May 25, collected Nov. 1; weight of 3 analyzed (largest, smallest, and medium), 2 lbs., 11 oz. *c* | 88.40 | 1.07 | 1.30 | 1.35 | 7.62 | 0.27 | 9.2 | 11.2 | 11.6 | 65.7 | 2.3 | do | 1518 |
| 1519 | American *c* | 91.75 | 0.99 | 0.95 | 1.09 | 5.12 | 0.10 | 11.9 | 11.5 | 13.1 | 62.3 | 1.2 | Mass. State Ex. Sta. Rep., 1889, p. 187 | 1519 |
| | Maximum | 91.75 | 1.41 | 1.32 | 1.39 | 9.11 | 0.27 | 11.9 | 11.5 | 13.1 | 70.5 | 2.3 | | |
| | Minimum | 87.08 | 0.99 | 0.95 | 1.09 | 5.12 | 0.09 | 8.8 | 8.9 | 9.0 | 62.3 | 0.7 | | |
| | Average | **88.61** | **1.15** | **1.18** | **1.25** | **7.66** | **0.15** | **10.2** | **10.5** | **11.1** | **66.9** | **1.3** | | |
| | Carrots: | | | | | | | | | | | | | |
| 1520 | Early Half Long *a* | 88.82 | 0.93 | 1.35 | 0.86 | 7.39 | 0.65 | 8.3 | 12.1 | 7.7 | 66.1 | 5.8 | U. S. Dept. Agr. Rep., 1880, p. 169 | 1520 |
| 1521 | Do. *a* | 87.85 | 1.29 | 8.97 | 2.32 | 6.86 | 0.71 | 10.6 | 8.0 | 19.1 | 56.4 | 5.9 | U. S. Dept. Agr. Rep., 1881–'82, p. 555 | 1521 |
| | Early Long Orange, collected— | | | | | | | | | | | | | |
| 1522 | June 9; average weight of one, 0.4 gram. | 88.40 | 2.57 | 1.26 | 0.62 | 6.71 | 0.44 | 22.2 | 10.8 | 5.4 | 57.8 | 3.8 | U. S. Dept. Agr. Rep., 1883, p. 239 | 1522 |
| 1523 | June 19; length, 11 cm.; average weight of one, 0.94 gram. | 88.20 | 1.55 | 1.17 | 1.62 | 6.74 | 0.72 | 13.1 | 9.9 | 13.8 | 57.1 | 6.1 | do | 1523 |
| 1524 | June 26; length, 29 cm.; average weight of one, 16 grams. | 87.40 | 1.54 | 1.18 | 0.99 | 8.55 | 0.34 | 12.2 | 9.4 | 7.9 | 67.8 | 2.7 | do | 1524 |
| 1525 | July 3; breadth, 1.5 cm.; average weight of one, 18.2 grams. | 87.70 | 1.36 | 1.22 | 1.51 | 7.64 | 0.57 | 11.1 | 9.9 | 12.3 | 62.1 | 4.6 | do | 1525 |
| 1526 | July 10; length, 30 cm.; breadth, 2.5 cm.; average weight of one, 38 grams. | 87.30 | 1.33 | 0.98 | 0.90 | 9.03 | 0.46 | 10.5 | 7.7 | 7.1 | 71.1 | 3.6 | do | 1526 |
| 1527 | July 20; length, 30 cm.; breadth, 3 cm.; average weight of one, 74 grams. | 87.50 | 1.26 | 1.03 | 1.11 | 8.44 | 0.66 | 10.1 | 8.3 | 8.9 | 67.5 | 5.2 | do | 1527 |

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | ROOTS, BULBS, TUBERS, AND OTHER VEGETABLES—Continued. | | | | | | | | | | | | | |
| | Carrots—Continued. | | | | | | | | | | | | | |
| | Early Long Orange, collected— | % | % | % | % | % | % | % | % | % | % | % | | |
| 1528 | Oct. 15; length, 30 cm.; breadth, 3.4 cm.; average weight of one, 157 grams. | 84.30 | 1.55 | 1.66 | 1.25 | 10.74 | 0.50 | 9.9 | 10.5 | 8.0 | 68.4 | 3.2 | U. S. Dept. Agr. Rep., 1883, p. 239 | 1528 |
| 1529 | Oct. 25; length, 51 cm.; breadth, 9.6 cm.; average weight of one, 697 grams. | 86.89 | 1.34 | 1.99 | 1.55 | 7.70 | 0.62 | 10.3 | 15.1 | 11.7 | 58.3 | 4.6 | do | 1529 |
| 1530 | Variety unknown | 86.52 | 1.05 | 0.84 | 0.99 | 10.40 | 0.20 | 7.8 | 6.2 | 7.3 | 77.2 | 1.5 | Ohio Ex. Sta. Rep., 1884, p. 212 | 1530 |
| 1531 | Danvers | 87.48 | 0.61 | 1.21 | 0.95 | 9.26 | 0.49 | 4.9 | 9.6 | 7.6 | 74.0 | 3.9 | Mass. State Ex. Sta. Rep., 1885, p. 80 | 1531 |
| 1532 | Yellow Danvers | 91.13 | 1.00 | 1.08 | 1.41 | 5.09 | 0.29 | 11.3 | 12.2 | 15.9 | 57.4 | 3.2 | N. Y. State Ex. Sta. Rep., 1885, p. 306 | 1532 |
| 1533 | Variety unknown | 90.02 | 1.12 | 0.89 | 1.07 | 6.71 | 0.19 | 11.2 | 8.9 | 10.8 | 67.2 | 1.9 | Mass. State Ex. Sta. Rep., 1887, p. 30 | 1533 |
| 1534 | Danvers | 90.05 | 0.82 | 0.80 | 1.03 | 7.13 | 0.17 | 8.3 | 8.0 | 10.2 | 71.8 | 1.7 | Mass. State Ex. Sta. Rep., 1889, p. 34 | 1534 |
| | Analyses, Nos. 1521, 1522, 1530–1535. Maximum | 91.13 | 1.34 | 1.99 | 2.32 | 10.40 | 0.71 | 11.3 | 15.1 | 19.1 | 77.2 | 5.9 | | |
| | Analyses, Nos. 1521, 1522, 1530–1535. Minimum | 86.52 | 0.61 | 0.80 | 0.86 | 5.09 | 0.17 | 4.9 | 6.2 | 7.3 | 56.4 | 1.5 | | |
| | Analyses, Nos. 1521, 1522, 1530–1535. Average | **88.59** | **1.02** | **1.14** | **1.27** | **7.56** | **0.42** | **8.8** | **10.0** | **11.2** | **66.3** | **3.7** | | |
| | Onions: | | | | | | | | | | | | | |
| 1535 | White *a* | 85.26 | 0.68 | 2.28 | 0.76 | 10.80 | 0.22 | 4.6 | 15.5 | 5.2 | 73.2 | 1.5 | U. S. Dept. Agr. Rep., 1881–'82, p. 555 | 1535 |
| | Giant Della Rocca, collected— | | | | | | | | | | | | | |
| 1536 | June 29; average weight of one, 3 grams, 22.6 per cent of whole plant. *a* | 91.05 | 0.95 | 1.12 | 1.22 | 5.06 | 0.60 | 10.7 | 12.5 | 13.6 | 56.5 | 6.7 | U. S. Dept. Agr. Rep., 1883, p. 240 | 1536 |
| 1537 | July 10; breadth, 3.7 cm.; average weight of one, 15 grams, 45.4 per cent of whole plant. *a* | 87.19 | 1.20 | 1.57 | 1.35 | 7.87 | 0.82 | 9.4 | 12.2 | 10.5 | 61.5 | 6.4 | do | 1537 |
| 1538 | July 20; breadth, 4 cm.; average weight of one, 30 grams, 62.2 per cent of whole plant. *a* | 93.52 | 0.62 | 1.10 | 0.63 | 3.77 | 0.36 | 9.6 | 17.6 | 9.8 | 57.5 | 5.5 | do | 1538 |
| 1539 | Potato *a* | 86.48 | 0.49 | 0.77 | 0.73 | 11.28 | 0.25 | 3.6 | 5.7 | 5.4 | 83.4 | 1.9 | U. S. Dept. Agr. Rep., 1883, p. 235 | 1539 |
| 1540 | Large Red Wethersfield | 90.32 | 0.42 | 1.04 | 0.59 | 7.39 | 0.24 | 4.3 | 10.8 | 6.1 | 76.3 | 2.5 | N. Y. State Ex. Sta. Rep., 1883, p. 151 | 1540 |
| 1541 | Yellow Danvers | 88.20 | 0.48 | 1.14 | 0.71 | 9.23 | 0.24 | 4.0 | 9.7 | 6.0 | 78.2 | 2.1 | do | 1541 |
| 1542 | Top onions | 81.53 | 0.69 | 2.11 | 0.74 | 14.69 | 0.24 | 3.7 | 11.4 | 4.0 | 79.6 | 1.3 | do | 1542 |
| | Analyses, Nos. 1536, 1539–1543. Maximum | 93.52 | 0.69 | 2.28 | 0.76 | 14.69 | 0.36 | 9.6 | 17.6 | 9.8 | 79.6 | 5.5 | | |
| | Analyses, Nos. 1536, 1539–1543. Minimum | 81.53 | 0.42 | 0.77 | 0.59 | 3.77 | 0.22 | 3.6 | 5.7 | 4.0 | 57.5 | 1.3 | | |
| | Analyses, Nos. 1536, 1539–1543. Average | **87.55** | **0.57** | **1.40** | **0.69** | **9.53** | **0.26** | **4.5** | **11.3** | **5.5** | **76.5** | **2.2** | | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Squashes: | | | | | | | | | | | | | |
| 1543 | Marrow (flesh) | 89.65 | 0.73 | 0.96 | 1.19 | 7.13 | 0.34 | 7.1 | 9.3 | 11.5 | 68.8 | 3.3 | Bussey Inst. Bul., 1877, p. 88 | 1543 |
| 1544 | Hubbard (flesh) | 85.28 | 0.91 | 0.69 | 0.99 | 11.98 | 0.15 | 6.2 | 4.5 | 6.8 | 81.5 | 1.0 | do | 1544 |
| 1545 | Crooked Neck (flesh) | 89.33 | 0.53 | 1.11 | 0.95 | 8.04 | 0.04 | 4.9 | 10.4 | 8.9 | 75.4 | 0.4 | do | 1545 |
| 1546 | Marrow (rind) | 85.65 | 1.49 | 2.81 | 2.86 | 6.43 | 0.76 | 10.4 | 19.6 | 19.9 | 44.8 | 5.3 | do | 1546 |
| 1547 | Hubbard (rind) | 79.01 | 1.13 | 2.75 | 3.89 | 12.42 | 0.80 | 5.4 | 13.1 | 18.5 | 59.2 | 3.8 | Bussey Inst. Bul., 1877, p. 89 | 1547 |
| 1548 | Crooked Neck (rind) | 81.35 | 1.02 | 2.94 | 2.82 | 11.28 | 0.59 | 5.5 | 15.7 | 15.1 | 60.4 | 3.3 | Bussey Inst. Bul., 1877, p. 90 | 1548 |
| 1549 | Marrow (seeds and stringy matter) | 72.35 | 1.70 | 5.75 | 4.48 | 7.97 | 7.75 | 6.1 | 20.8 | 16.2 | 28.8 | 28.1 | Bussey Inst. Bul., 1877, p. 88 | 1549 |
| 1550 | Hubbard (seeds and stringy matter) | 66.72 | 1.64 | 6.07 | 6.24 | 11.77 | 7.56 | 4.9 | 18.2 | 18.7 | 35.5 | 22.7 | Bussey Inst. Bul., 1877, p. 89 | 1550 |
| 1551 | Crooked Neck (seeds and stringy matter) | 80.32 | 0.83 | 3.99 | 2.05 | 6.20 | 3.61 | 4.9 | 23.9 | 12.2 | 37.4 | 21.6 | Bussey Inst. Bul., 1877, p. 90 | 1551 |
| 1552 | Turban, from Washington market *a* | 95.18 | 0.38 | 0.64 | 0.53 | 2.95 | 0.32 | 7.9 | 13.3 | 11.0 | 61.1 | 6.7 | U. S. Dept. Agr. Rep., 1881–'82, p. 555 | 1552 |
| 1553 | Crooked Neck, from Washington market *a* | 91.58 | 0.42 | 0.68 | 0.54 | 3.54 | 0.24 | 7.7 | 12.5 | 9.9 | 65.5 | 4.4 | do | 1553 |
| | Average of the flesh | **88.09** | **1.72** | **0.92** | **1.04** | **9.05** | **0.18** | **6.1** | **8.1** | **9.0** | **75.2** | **1.6** | | |
| | Average of the rind | **82.00** | **1.21** | **2.84** | **3.19** | **10.04** | **0.72** | **7.1** | **16.1** | **18.1** | **54.6** | **4.1** | | |
| | Average of the seeds and stringy matter. | **74.03** | **1.39** | **5.27** | **4.26** | **8.64** | **6.31** | **5.3** | **21.0** | **15.7** | **33.9** | **24.1** | | |
| | Pumpkins: | | | | | | | | | | | | | |
| 1554 | Common round yellow (flesh) | 92.41 | 0.71 | 0.87 | 1.11 | 4.80 | 0.10 | 9.3 | 11.5 | 14.6 | 63.3 | 1.3 | Bussey Inst. Bul., 1877, p. 83 | 1554 |
| 1555 | Smaller round yellow (flesh) | 94.37 | 0.63 | 0.95 | 0.86 | 3.05 | 0.14 | 11.6 | 13.8 | 15.9 | 56.2 | 2.5 | do | 1555 |
| 1556 | Common round yellow (rind) | 84.44 | 1.50 | 2.90 | 3.92 | 6.75 | 0.49 | 9.6 | 18.7 | 25.2 | 43.4 | 3.1 | Bussey Inst. Bul., 1877, p. 84 | 1556 |
| 1557 | Smaller round yellow (rind) | 88.01 | 1.23 | 2.63 | 2.97 | 4.67 | 0.49 | 10.3 | 22.0 | 24.7 | 38.9 | 4.1 | do | 1557 |
| 1558 | Common round yellow (seeds and stringy matter). | 75.94 | 1.66 | 6.32 | 3.74 | 5.21 | 7.13 | 6.9 | 26.3 | 15.5 | 21.7 | 29.6 | do | 1558 |
| 1559 | Smaller round yellow (seeds and stringy matter). | 77.79 | 1.36 | 5.68 | 4.12 | 4.34 | 6.71 | 6.1 | 25.6 | 18.5 | 19.6 | 30.2 | do | 1559 |
| 1560 | Variety unknown | 92.27 | 0.63 | 1.11 | 1.49 | 4.34 | 0.16 | 8.2 | 14.4 | 19.2 | 56.1 | 2.1 | N. Y. State Ex. Sta. Rep., 1885, p. 306 | 1560 |
| | Average of the flesh | **93.39** | **0.67** | **0.91** | **0.98** | **3.93** | **0.12** | **10.4** | **12.7** | **15.3** | **59.7** | **1.9** | | |
| | Average of the rind | **86.23** | **1.36** | **2.76** | **3.45** | **5.71** | **0.49** | **10.0** | **20.4** | **24.9** | **41.1** | **3.6** | | |
| | Average of the seeds and stringy matter. | **76.86** | **1.51** | **6.00** | **3.93** | **4.78** | **6.92** | **6.5** | **25.9** | **17.0** | **20.6** | **30.0** | | |
| | Cucumbers: | | | | | | | | | | | | | |
| 1561 | From Washington market *a* | 95.70 | 0.46 | 0.83 | 0.85 | 1.95 | 0.21 | 10.7 | 19.4 | 19.6 | 43.3 | 5.0 | U. S. Dept. Agr. Rep., 1883, p. 234 | 1561 |
| 1562 | From Washington market, weight 160.2 grams apiece. *a* | 96.29 | 0.45 | 0.79 | 0.53 | 1.72 | 0.22 | 12.1 | 21.5 | 14.3 | 46.3 | 5.8 | U. S. Dept. Agr. Rep., 1881–'82, p. 555 | 1562 |
| | Average | **95.99** | **0.46** | **0.81** | **0.69** | **1.83** | **0.22** | **11.5** | **20.3** | **17.3** | **45.4** | **5.5** | | |
| | Cabbages: | | | | | | | | | | | | | |
| 1563 | English cabbage *a* | 93.59 | 0.72 | 2.06 | 1.44 | 2.00 | 0.19 | 11.2 | 32.1 | 22.4 | 31.2 | 3.1 | U. S. Dept. Agr. Rep., 1881–'82, p. 555 | 1563 |
| | Henderson, entire head, collected— | | | | | | | | | | | | | |
| 1564 | June 2; height, 29 cm. *a* | 88.39 | 3.43 | 2.71 | 0.94 | 3.86 | 0.67 | 29.5 | 23.3 | 8.1 | 33.3 | 5.8 | U. S. Dept. Agr. Rep., 1883, p. 240 | 1564 |
| 1565 | June 26; height 33 cm.; average weight of one, 466 grams; beginning to head. *a* | 87.39 | 2.55 | 2.94 | 1.32 | 5.11 | 0.69 | 20.2 | 23.3 | 10.5 | 40.5 | 5.5 | do | 1565 |
| 1566 | July 3; height, 30 cm.; average weight of one, 549 grams. *a* | 86.01 | 2.70 | 2.62 | 1.55 | 6.38 | 0.74 | 19.3 | 18.7 | 11.1 | 45.6 | 5.3 | do | 1566 |
| 1567 | July 10; height, 30 cm.; average weight of one, 925 grams; well set. *a* | 87.46 | 2.08 | 2.72 | 1.51 | 5.69 | 0.54 | 16.6 | 21.7 | 12.1 | 45.3 | 4.3 | do | 1567 |

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | ROOTS, BULBS, TUBERS, AND OTHER VEGETABLES—Continued. | | | | | | | | | | | | | |
| | Cabbages—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 1568 | Henderson, interior, collected Oct. 15; average weight of one, 436 grams. *a* | 94.31 | 0.56 | 1.48 | 0.54 | 2.87 | 0.24 | 9.8 | 26.0 | 9.4 | 50.5 | 4.3 | U. S. Dept. Agr. Rep., 1883, p. 240 | 1568 |
| 1569 | Henderson, outer leaves | 89.86 | 1.35 | 1.83 | 2.98 | 3.51 | 0.47 | 13.3 | 18.1 | 29.4 | 34.5 | 4.7 | N. Y. State Ex. Sta. Rep., 1886, p. 365. | 1569 |
| | Average, Nos. 1563 and 1567 | **90.52** | **1.40** | **2.39** | **1.47** | **3.85** | **0.37** | **14.8** | **25.1** | **15.5** | **40.7** | **3.9** | | |
| 1570 | Cauliflower, from Washington market; weight of heads apiece, 285 grams. *a* | 90.82 | 0.81 | 1.62 | 1.02 | 4.94 | 0.79 | 8.9 | 17.5 | 11.1 | 53.9 | 8.6 | U. S. Dept. Agr. Rep., 1881–'82, p. 555. | 1570 |
| | Lettuce: | | | | | | | | | | | | | |
| 1571 | Boston *a* | 95.87 | 0.78 | 0.97 | 0.53 | 1.64 | 0.21 | 19.0 | 23.4 | 12.9 | 39.6 | 5.1 | U. S. Dept. Agr. Rep., 1883, p. 234 | 1571 |
| | Entire plant, collected— | | | | | | | | | | | | | |
| 1572 | May 18; average weight of one, 1 gram. *a* | 94.39 | 1.49 | 1.47 | 0.55 | 1.80 | 0.30 | 26.5 | 26.2 | 9.9 | 32.1 | 5.3 | U. S. Dept. Agr. Rep., 1883, p. 241 | 1572 |
| 1573 | June 2 *a* | 90.06 | 4.72 | 1.60 | 0.78 | 2.42 | 0.42 | 47.5 | 16.1 | 7.8 | 24.4 | 4.2 | do | 1573 |
| 1574 | June 9; average weight of one, 96 grams *a* | 95.02 | 1.05 | 1.15 | 0.41 | 2.03 | 0.34 | 21.1 | 23.2 | 8.2 | 40.7 | 6.8 | do | 1574 |
| 1575 | June 26; breadth, 17 cm.; average weight of one, 256 grams. *a* | 94.59 | 1.06 | 1.45 | 0.84 | 1.69 | 0.37 | 19.6 | 26.8 | 15.5 | 31.3 | 6.8 | do | 1575 |
| 1576 | July 3; breadth, 31 cm.; average weight of one, 266 grams. *a* | 94.31 | 0.94 | 1.42 | 0.99 | 1.88 | 0.46 | 16.6 | 25.0 | 17.4 | 33.0 | 8.0 | do | 1576 |
| 1577 | July 14; breadth 60 cm.; average weight of one, 287 grams. *a* | 91.50 | 1.22 | 1.82 | 1.09 | 3.77 | 0.60 | 14.4 | 21.4 | 12.8 | 44.4 | 7.0 | do | 1577 |
| 1578 | Stem, collected July 28; breadth, 85 cm.; average weight of one, 287 grams; 41.08 per cent of whole plant. *a* | 88.46 | 1.18 | 0.88 | 2.68 | 6.15 | 0.65 | 10.2 | 7.7 | 23.2 | 53.3 | 5.6 | do | 1578 |
| 1579 | Leaves, collected July 28; breadth, 85 cm.; average weight of one, 287 grams; 58.92 per cent of whole plant. *a* | 86.28 | 1.71 | 2.27 | 2.57 | 6.22 | 0.95 | 12.5 | 16.5 | 18.7 | 45.4 | 6.9 | do | 1579 |
| 1580 | Spinach, from Washington market *a* | 92.42 | 1.94 | 2.10 | 0.67 | 2.38 | 0.49 | 25.7 | 27.7 | 8.8 | 31.4 | 6.4 | U. S. Dept. Agr. Rep., 1883, p. 234 | 1580 |
| 1581 | Rhubarb (stems), from Washington market *a* | 92.67 | 0.94 | 0.83 | 1.11 | 3.26 | 1.19 | 12.8 | 11.3 | 15.2 | 44.5 | 16.2 | do | 1581 |
| | Asparagus: | | | | | | | | | | | | | |
| 1582 | Large white, from Washington market; height, 16 cm.; weight, apiece, 1.08 grams. *a* | 93.61 | 0.97 | 1.64 | 0.65 | 2.90 | 0.23 | 15.2 | 25.7 | 10.2 | 45.4 | 3.5 | U. S. Dept. Agr. Rep., 1883, p. 235 | 1582 |
| 1583 | Small green, from Washington market; height, 15 cm.; weight apiece, 1.03 grams. *a* | 94.25 | 0.53 | 1.77 | 0.78 | 2.42 | 0.25 | 9.2 | 30.9 | 13.6 | 42.0 | 4.3 | do | 1583 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1584 | Do. *a* | 94.02 | 0.52 | 2.07 | 0.79 | 2.33 | 0.27 | 8.7 | 34.6 | 13.2 | 39.0 | 4.5 | U. S. Dept. Agr. Rep., 1883, p. 234 | 1584 |
| | Average | **93.96** | **0.67** | **1.83** | **0.74** | **2.55** | **0.25** | **11.1** | **30.2** | **12.2** | **42.3** | **4.2** | | |
| 1585 | Tomatoes, Acme | 91.26 | 0.73 | 1.00 | 0.70 | 5.84 | 0.47 | 8.3 | 11.3 | 8.0 | 67.0 | 5.4 | N. Y. State Ex. Sta. Rep., 1883, p. 151 | 1585 |
| 1586 | Green peas, from Washington market *a* | 78.06 | 0.88 | 4.37 | 1.66 | 14.48 | 0.55 | 4.0 | 9.9 | 7.6 | 66.0 | 2.5 | U. S. Dept. Agr. Rep., 1881–'82, p. 555 | 1586 |
| 1587 | Pods of preceding | 83.17 | 0.88 | 1.54 | 2.91 | 10.97 | 0.53 | 5.2 | 9.2 | 17.3 | 65.2 | 3.1 | do | 1587 |
| 1588 | Green peas, sugar; pod and seed in edible condition. | 81.80 | 0.67 | 3.37 | 1.59 | 12.15 | 0.42 | 3.7 | 18.5 | 8.7 | 66.8 | 2.3 | N. Y. State Ex. Sta. Rep., 1883, p. 151 | 1588 |
| | String beans: | | | | | | | | | | | | | |
| 1589 | Pot, from Washington market *a* | 91.00 | 0.70 | 1.65 | 1.25 | 5.00 | 0.40 | 7.8 | 18.3 | 13.9 | 55.6 | 4.4 | U. S. Dept. Agr. Rep., 1883, p. 234 | 1589 |
| 1590 | Early China | 83.46 | 0.83 | 2.75 | 2.58 | 10.04 | 0.34 | 5.0 | 16.5 | 15.6 | 60.8 | 2.1 | N. Y. State Ex. Sta. Rep., 1883, p. 151 | 1590 |
| | Average | **87.23** | **0.76** | **2.29** | **1.92** | **7.52** | **0.37** | **5.9** | **17.2** | **15.0** | **59.0** | **2.9** | | |
| 1591 | Lima beans, from Washington market *a* | 68.46 | 1.69 | 7.15 | 1.71 | 20.30 | 0.69 | 5.4 | 22.6 | 5.4 | 64.4 | 2.2 | U. S. Dept. Agr. Rep., 1883, p. 235 | 1591 |
| 1592 | Okra | 87.41 | 0.74 | 1.99 | 3.42 | 6.04 | 0.40 | 5.9 | 15.8 | 27.1 | 48.0 | 3.2 | N. Y. State Ex. Sta. Rep., 1884, p. 333 | 1592 |
| 1593 | Sweet corn, Evergreen, from Washington market *a* | 81.25 | 0.66 | 2.81 | 0.51 | 13.67 | 1.10 | 3.5 | 15.1 | 2.7 | 72.9 | 5.8 | U. S. Dept. Agr. Rep., 1883, p. 235 | 1593 |
| 1594 | Eggplant, from Washington market; diameter, 5½ inches; weight, 2.45 pounds apiece. *a* | 92.93 | 0.50 | 1.15 | 0.77 | 4.34 | 0.31 | 7.0 | 16.2 | 10.9 | 61.5 | 4.4 | do | 1594 |
| | FRUIT AND MELONS. | | | | | | | | | | | | | |
| | Apples: | | | | | | | | | | | | | |
| 1595 | Baldwin (flesh); medium size; sound and fair; analyzed in February. | 84.11 | 0.23 | 0.21 | 0.91 | 14.26 | 0.28 | 1.5 | 1.3 | 5.7 | 89.7 | 1.8 | Bassey Inst. Bul., 1875, p. 365 | 1595 |
| 1596 | Roxbury Russet (flesh); large, fair, and in excellent condition. | 82.22 | 0.26 | 0.27 | 0.95 | 15.77 | 0.53 | 1.5 | 1.5 | 5.3 | 88.7 | 3.0 | do | 1596 |
| 1597 | Baldwin (skin), from same apples as No. 1596; skin free from flesh. | 71.60 | 0.45 | 1.00 | 5.37 | 19.31 | 2.27 | 1.6 | 3.5 | 18.9 | 68.0 | 8.0 | do | 1597 |
| 1598 | Roxbury Russet (skin), from same apples as No. 1597; skin free from flesh. | 69.93 | 0.53 | 1.08 | 5.02 | 21.73 | 1.71 | 1.8 | 3.6 | 16.7 | 72.2 | 5.7 | do | 1598 |
| 1599 | R. I. Greening (stem and seeds not included) | 85.96 | 0.28 | 0.27 | ..... | ..... | ..... | 2.0 | 1.7 | ..... | ..... | ..... | Conn. State (Middletown) Ex. Sta. Rep., 1877–'78, p. 39. | 1599 |
| 1600 | Green *a* | 85.83 | 0.52 | 0.60 | 1.38 | 10.43 | 1.24 | 3.7 | 4.2 | 9.8 | 73.6 | 8.7 | U. S. Dept. Agr. Rep., 1881–'82, p. 555 | 1600 |
| 1601 | Do | 82.00 | 0.64 | 0.53 | 1.19 | 14.30 | 1.34 | 3.6 | 3.0 | 6.6 | 79.4 | 7.4 | do | 1601 |
| 1602 | Tolman Sweet | 77.30 | 0.46 | 0.50 | 1.37 | 19.96 | 0.41 | 2.0 | 2.2 | 6.0 | 88.0 | 1.8 | N. Y. State Ex. Sta. Rep., 1883, p. 152 | 1602 |
| 1603 | R. I. Greening *k* | 82.50 | 0.37 | 0.80 | 1.24 | 14.60 | 0.49 | 2.1 | 4.6 | 7.1 | 83.4 | 2.8 | Mass. State Ex. Sta. Rep., 1885, p. 90 | 1603 |
| 1604 | Sweet *k* | 82.50 | 0.35 | 0.70 | 1.07 | 15.09 | 0.30 | 2.0 | 3.9 | 6.1 | 86.3 | 1.7 | do | 1604 |
| 1605 | Pears (green) *a* | 83.92 | 0.54 | 0.56 | 2.73 | 11.46 | 0.79 | 3.3 | 3.4 | 17.5 | 70.8 | 5.0 | U. S. Dept. Agr. Rep., 1881–'82, p. 555 | 1605 |
| 1606 | Cherries, May Duke; picked June 13 *a** | 86.10 | 0.58 | 1.10 | 0.24 | 11.14 | 0.84 | 4.2 | 7.9 | 1.7 | 80.2 | 6.0 | U. S. Dept. Agr. Rep., 1883, p. 235 | 1606 |
| | Strawberries: | | | | | | | | | | | | | |
| 1607 | Monarch, picked June 7 *a** | 93.97 | 0.39 | 0.58 | 0.74 | 3.72 | 0.60 | 6.5 | 9.6 | 12.2 | 61.7 | 10.0 | U. S. Dept. Agr. Rep., 1883, p. 234 | 1607 |
| 1608 | Monarch, picked June 13 *a** | 93.25 | 0.44 | 0.59 | 0.87 | 4.06 | 0.77 | 6.5 | 8.7 | 13.0 | 60.5 | 11.3 | U. S. Dept. Agr. Rep., 1883, p. 235 | 1608 |
| 1609 | Sharpless, picked June 13 *a** | 90.21 | 0.60 | 1.01 | 0.70 | 6.38 | 1.10 | 6.1 | 10.3 | 7.2 | 65.1 | 11.3 | do | 1609 |
| 1610 | Charles Downing, picked June 13 *a** | 91.63 | 0.62 | 0.73 | 1.37 | 4.82 | 0.83 | 7.4 | 8.8 | 16.3 | 57.6 | 9.9 | do | 1610 |
| 1611 | Indiana, picked May 21† | 91.51 | 0.62 | 1.04 | 1.27 | 5.02 | 0.54 | 7.2 | 12.2 | 14.9 | 59.3 | 6.4 | Tenn. Ex. Sta. Bul. vol. II, 4, 1889 | 1611 |
| 1612 | Jumbo, picked May 21† | 90.83 | 0.55 | 0.96 | 1.37 | 5.69 | 0.60 | 6.0 | 10.4 | 14.9 | 62.1 | 6.6 | do | 1612 |

* In *loc. cit.*, free acid given.

† In *loc. cit.*, sugars and free acid given.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | FRUIT AND MELONS—Continued. | | | | | | | | | | | | | |
| | Strawberries—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 1613 | May King, picked May 22* | 90.13 | 0.66 | 1.10 | 1.43 | 6.06 | 0.62 | 6.7 | 11.2 | 14.4 | 61.4 | 6.3 | Tenn. Ex. Sta. Bul. vol. II, 4, 1889 | 1613 |
| 1614 | Agriculturist, picked May 22* | 91.25 | 0.58 | 0.98 | 1.17 | 5.40 | 0.62 | 6.7 | 11.2 | 13.4 | 61.6 | 7.1 | do | 1614 |
| 1615 | Cornelia, picked May 23* | 90.42 | 0.63 | 0.94 | 1.53 | 6.00 | 0.48 | 6.6 | 9.8 | 16.0 | 62.6 | 5.0 | do | 1615 |
| 1616 | Legal Tender, picked May 23* | 90.29 | 0.61 | 0.99 | 1.33 | 6.16 | 0.62 | 6.3 | 10.2 | 13.7 | 63.4 | 6.4 | do | 1616 |
| 1617 | Bidwell, picked May 24* | 89.43 | 0.67 | 1.24 | 1.99 | 5.82 | 0.85 | 6.4 | 11.7 | 18.8 | 55.1 | 8.0 | do | 1617 |
| 1618 | Primo, picked May 24* | 89.98 | 0.69 | 1.09 | 1.68 | 5.88 | 0.68 | 6.9 | 10.9 | 16.8 | 58.6 | 6.8 | do | 1618 |
| 1619 | Nameless, picked May 25* | 92.43 | 0.44 | 0.76 | 1.46 | 4.28 | 0.63 | 5.8 | 10.0 | 19.2 | 56.7 | 8.3 | do | 1619 |
| 1620 | Mrs. Garfield, picked May 25* | 91.22 | 0.58 | 0.95 | 1.28 | 5.41 | 0.56 | 6.6 | 10.8 | 14.5 | 61.7 | 6.4 | do | 1620 |
| 1621 | Kentucky, picked May 25* | 87.72 | 0.72 | 1.01 | 1.64 | 7.99 | 0.92 | 5.9 | 8.2 | 13.4 | 65.0 | 7.5 | do | 1621 |
| 1622 | Jucunda, picked May 25* | 90.44 | 0.73 | 1.10 | 2.26 | 4.67 | 0.80 | 7.6 | 11.3 | 23.7 | 49.0 | 8.4 | do | 1622 |
| 1623 | Perry Seedling, picked May 27* | 89.71 | 0.82 | 1.11 | 1.80 | 6.06 | 0.50 | 8.0 | 10.8 | 17.5 | 58.8 | 4.9 | do | 1623 |
| 1624 | Boone, picked May 27* | 91.35 | 0.70 | 0.88 | 1.97 | 4.31 | 0.79 | 8.1 | 10.2 | 22.7 | 49.9 | 9.1 | do | 1624 |
| 1625 | Manchester, picked May 28* | 91.05 | 0.37 | 0.99 | 1.30 | 5.86 | 0.43 | 4.2 | 11.0 | 14.5 | 65.5 | 4.8 | do | 1625 |
| | Maximum | 93.97 | 0.82 | 1.24 | 2.26 | 6.38 | 1.10 | 8.1 | 12.2 | 23.7 | 65.5 | 11.3 | | |
| | Minimum | 87.72 | 0.37 | 0.58 | 0.70 | 3.72 | 0.43 | 4.2 | 8.2 | 7.2 | 49.0 | 4.8 | | |
| | Average | **90.84** | **0.60** | **0.95** | **1.43** | **5.50** | **0.68** | **6.5** | **10.4** | **15.6** | **60.1** | **7.4** | | |
| 1626 | Raspberries | 85.82 | 0.55 | 0.99 | 2.88 | ..... | ..... | 3.9 | 7.0 | 20.4 | ..... | ..... | N. Y. State Ex. Sta. Rep., 1883, p. 155 | 1626 |
| 1627 | Blackberries *a* | 88.91 | 0.58 | 0.94 | 2.46 | 5.03 | 2.08 | 5.2 | 8.5 | 22.2 | 45.3 | 18.8 | U. S. Dept. Agr. Rep., 1881–'82, p. 555 | 1627 |
| 1628 | Whortleberries *a* | 82.42 | 0.41 | 0.66 | 3.17 | 10.31 | 3.03 | 2.4 | 3.8 | 18.0 | 58.6 | 17.2 | do | 1628 |
| 1629 | Lemons *a* | 90.22 | 0.51 | 0.82 | 1.31 | 6.90 | 0.24 | 5.2 | 8.4 | 13.4 | 70.5 | 2.5 | do | 1629 |
| 1630 | Lemons, weight, 85 grams apiece *a* † | 88.38 | 0.51 | 1.09 | 0.85 | 7.62 | 1.55 | 4.4 | 9.3 | 7.3 | 65.6 | 13.4 | U. S. Dept. Agr. Rep., 1883, p. 234 | 1630 |
| | Average | **89.30** | **0.51** | **0.95** | **1.08** | **7.27** | **0.89** | **4.7** | **8.8** | **10.1** | **67.9** | **8.5** | | |
| 1631 | Yellow bananas (interior), weight, 111 grams apiece *a* † | 66.25 | 1.15 | 1.41 | 0.96 | 28.88 | 1.35 | 3.4 | 4.2 | 2.8 | 85.6 | 4.0 | do | 1631 |
| 1632 | Pineapple, weight, 671 grams *a* † | 89.28 | 0.35 | 0.39 | 0.41 | 9.31 | 0.26 | 3.3 | 3.6 | 3.8 | 86.9 | 2.4 | U. S. Dept. Agr. Rep., 1883, p. 235 | 1632 |
| | Watermelon: | | | | | | | | | | | | | |
| 1633 | Gypsy (rind), percentage of whole, 55.78 *a* | 89.97 | 1.24 | 1.43 | 1.41 | 5.59 | 0.36 | 12.4 | 14.3 | 14.0 | 55.8 | 3.5 | U. S. Dept. Agr. Rep., 1883, p. 236 | 1633 |
| 1634 | Gypsy (pulp), percentage of whole, 6.87 *a* | 91.87 | 0.33 | 0.89 | 0.55 | 5.64 | 0.72 | 4.1 | 11.1 | 6.8 | 69.2 | 8.8 | do | 1634 |
| 1635 | Gypsy (seeds), percentage of whole, 2.24 *a* | 48.37 | 1.34 | 8.01 | 12.43 | 26.22 | 3.63 | 2.6 | 15.5 | 24.2 | 50.7 | 7.0 | do | 1635 |
| 1636 | Gypsy (juice), percentage of whole, 35.11 | 93.05 | 0.20 | 0.12 | | 6.63 | | 2.9 | 1.6 | | 95.5 | | do | 1636 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Nutmeg melon: | | | | | | | | | | | | | |
| 1637 | Rind, percentage of whole, 40.49 *a* | 91.15 | 0.68 | 0.62 | 0.88 | 6.17 | 0.50 | 7.7 | 7.0 | 9.9 | 69.7 | 5.7 | do | 1637 |
| 1638 | Pulp, percentage of whole, 3.99 *a* | 76.44 | 1.49 | 1.36 | 2.13 | 18.40 | 0.18 | 6.3 | 5.7 | 9.1 | 73.9 | 5.0 | do | 1638 |
| 1639 | Pulp juice, percentage of whole, 46.32 | 90.53 | 0.56 | 0.50 | | 8.41 | | 5.9 | 5.2 | | 88.9 | | do | 1639 |
| 1640 | Seeds, percentage of whole, 3.27 | | | | | | | | | | | | do | 1640 |
| 1641 | Interior juice, percentage of whole, 5.44 | 92.61 | 1.01 | 0.91 | | 5.47 | | 13.7 | 12.3 | | 74.0 | | do | 1641 |
| | GRAIN AND OTHER SEEDS. | | | | | | | | | | | | | |
| | Corn (maize) kernels, dent varieties: | | | | | | | | | | | | | |
| 1642 | Yellow dent, raised in California | 11.42 | 1.37 | 11.31 | 1.56 | 69.16 | 5.18 | 1.5 | 12.8 | 1.8 | 78.1 | 5.8 | U. S. Census, 1880, vol. III, p. 418 | 1642 |
| 1643 | Ohio Dent, raised in Connecticut | 10.78 | 1.37 | 10.06 | 1.35 | 71.30 | 5.14 | 1.5 | 11.3 | 1.5 | 79.9 | 5.8 | Conn. State Ex. Sta. Rep., 1878, p. 67 | 1643 |
| 1644 | Coe Prolific, raised in Connecticut | 9.55 | 1.45 | 10.13 | 2.19 | 72.70 | 3.98 | 1.6 | 11.2 | 2.4 | 80.4 | 4.4 | Conn. State Ex. Sta. Rep., 1879, p. 88 | 1644 |
| 1645 | Benton, raised in Connecticut | 10.70 | 1.57 | 9.97 | 1.36 | 71.40 | 5.00 | 1.8 | 11.2 | 1.5 | 79.9 | 5.6 | do | 1145 |
| 1646 | Scioto, raised in Connecticut | 10.43 | 1.53 | 9.25 | 1.80 | 72.98 | 4.01 | 1.7 | 10.3 | 2.0 | 81.5 | 4.5 | do | 1646 |
| 1647 | White Ohio, raised in Connecticut | 9.70 | 1.79 | 11.28 | 1.73 | 71.30 | 4.20 | 1.9 | 12.5 | 1.9 | 79.0 | 4.7 | do | 1647 |
| 1648 | Wisconsin, raised in Connecticut | 9.72 | 1.56 | 11.60 | 2.06 | 70.17 | 4.89 | 1.7 | 12.9 | 2.3 | 77.7 | 5.4 | do | 1648 |
| 1649 | White Prolific, raised in Connecticut | 10.14 | 1.67 | 9.19 | 1.34 | 73.38 | 4.28 | 1.9 | 10.2 | 1.5 | 81.7 | 4.7 | do | 1649 |
| 1650 | Extra Early Adam, raised in Connecticut | 10.94 | 1.75 | 10.81 | 1.48 | 70.21 | 4.81 | 2.0 | 12.1 | 1.7 | 78.8 | 5.4 | do | 1650 |
| 1651 | Early Scioto, raised in Connecticut | 15.24 | 1.28 | 8.31 | 1.59 | 69.78 | 3.80 | 1.5 | 9.9 | 1.8 | 82.3 | 4.5 | Conn. State Ex. Sta. Rep., 1880, p. 81 | 1651 |
| | Average, varieties raised in Connecticut. | **10.80** | **1.55** | **10.07** | **1.65** | **71.47** | **4.46** | **1.8** | **11.3** | **1.9** | **80.0** | **5.0** | | |
| 1652 | Western White, raised in Illinois | 10.77 | 1.35 | 11.46 | 2.47 | 69.72 | 4.23 | 1.5 | 12.9 | 2.8 | 78.1 | 4.7 | Mass. Agr., 1879, p. 244 | 1652 |
| 1653 | Western Yellow, raised in Illinois | 11.90 | 1.41 | 10.89 | 2.95 | 68.39 | 4.46 | 1.6 | 12.4 | 3.3 | 77.6 | 5.1 | do | 1653 |
| 1654 | White Oil, raised in Indiana | 11.29 | 1.28 | 10.50 | 1.90 | 70.16 | 4.87 | 1.4 | 11.8 | 2.1 | 79.1 | 5.6 | Mich. Bd. of Agr. Rep., 1878, p. 409 | 1654 |
| 1655 | Yellow dent, raised in Kansas | 11.84 | 1.69 | 10.50 | 2.04 | 68.82 | 5.11 | 1.9 | 11.8 | 2.3 | 78.2 | 5.8 | U. S. Dept. Agr. Rep., 1883, p. 216 | 1655 |
| 1656 | Striped red and yellow dent, raised in Kansas. | 12.10 | 1.60 | 10.15 | 2.40 | 69.09 | 4.66 | 1.8 | 11.6 | 2.7 | 78.6 | 5.3 | do | 1656 |
| 1657 | Dark red dent, raised in Kansas | 12.26 | 1.36 | 10.33 | 2.65 | 68.93 | 4.47 | 1.6 | 11.8 | 3.1 | 78.4 | 5.1 | do | 1657 |
| 1658 | White dent, raised in Kansas | 12.06 | 1.56 | 10.15 | 2.10 | 68.44 | 5.69 | 1.8 | 11.6 | 2.4 | 77.7 | 6.5 | do | 1658 |
| 1659 | Yellow dent, raised in Kansas | 11.40 | 1.30 | 9.10 | 1.71 | 71.72 | 4.77 | 1.5 | 10.3 | 1.9 | 80.9 | 5.4 | do | 1659 |
| 1660 | White dent, raised in Kansas | 12.00 | 1.44 | 10.68 | 2.05 | 69.34 | 4.49 | 1.6 | 12.1 | 2.4 | 78.8 | 5.1 | do | 1660 |
| | Average, varieties raised in Kansas | **11.94** | **1.49** | **10.15** | **2.16** | **69.39** | **4.87** | **1.7** | **11.6** | **2.5** | **78.6** | **5.6** | | |
| 1661 | Willis, raised in Kentucky | 7.70 | 1.50 | 9.80 | 2.20 | 73.47 | 5.33 | 1.6 | 10.6 | 2.4 | 79.6 | 5.8 | U. S. Dept. Agr. Rep., 1883, p. 215 | 1661 |
| 1662 | Early Southern, raised in Massachusetts | 12.97 | 1.64 | 11.54 | 2.41 | 66.61 | 4.83 | 1.9 | 13.3 | 2.8 | 76.5 | 5.5 | Mass. Agr., 1879–'80, p. 243 | 1662 |
| 1663 | Pride of the North, raised in Massachusetts | 8.75 | 1.45 | 10.99 | 2.32 | 72.53 | 3.96 | 1.6 | 12.1 | 2.5 | 79.5 | 4.3 | Mass. State Ex. Sta. Rep., 1887, p. 97 | 1663 |
| 1664 | Western dent, raised in Massachusetts | 10.20 | 1.31 | 8.36 | 1.68 | 74.21 | 4.24 | 1.5 | 9.3 | 1.9 | 82.6 | 4.7 | Mass. State Ex. Sta. Rep., 1887, p. 98 | 1664 |
| 1665 | Yellow dent, raised in Michigan | 12.74 | 1.41 | 11.75 | 2.49 | 66.98 | 4.63 | 1.6 | 13.5 | 2.9 | 76.8 | 5.2 | Mich. Bd. Agr. Rep., 1878, p. 408 | 1665 |
| 1666 | Do | 11.66 | 1.51 | 11.48 | 2.48 | 67.80 | 5.07 | 1.7 | 13.0 | 2.8 | 76.8 | 5.7 | do | 1666 |
| 1667 | White dent, raised in Michigan | 13.73 | 1.60 | 11.52 | 2.26 | 66.26 | 4.63 | 1.9 | 13.4 | 2.6 | 76.7 | 5.4 | do | 1667 |
| 1668 | Hackberry dent, raised in Michigan | 12.47 | 1.47 | 9.88 | 2.30 | 69.11 | 4.77 | 1.7 | 11.3 | 2.7 | 78.9 | 5.4 | do | 1668 |

* In *loc. cit.*, sugars and free acid given.

† In *loc. cit.*, free acid given.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GRAIN AND OTHER SEEDS—Continued. | | | | | | | | | | | | | |
| | Corn (maize) kernels, dent varieties—Cont'd. | % | % | % | % | % | % | % | % | % | % | % | | |
| 1669 | Strawberry Roan, raised in Michigan | 14.05 | 1.39 | 10.31 | 2.03 | 67.63 | 4.59 | 1.6 | 12.0 | 2.4 | 78.7 | 5.3 | Mich. Bd. Agr. Rep., 1878, p. 409 | 1669 |
| 1670 | Pony Dent, raised in Michigan | 13.42 | 1.40 | 11.25 | 2.16 | 66.94 | 4.83 | 1.6 | 13.0 | 2.5 | 77.3 | 5.6 | do | 1670 |
| 1671 | Do | 13.29 | 1.31 | 10.63 | 2.21 | 67.53 | 5.03 | 1.5 | 12.4 | 2.6 | 77.7 | 5.8 | do | 1671 |
| | Average, varieties raised in Michigan. | **13.05** | **1.44** | **10.98** | **2.27** | **67.47** | **4.79** | **1.6** | **12.6** | **2.6** | **77.7** | **5.5** | | |
| 1672 | Yellow dent, raised in Minnesota | 12.14 | 1.63 | 9.50 | 1.62 | 70.86 | 4.25 | 1.9 | 10.8 | 1.9 | 80.6 | 4.8 | U. S. Census, 1880. vol. III | 1672 |
| 1673 | Do* | 6.22 | 1.74 | 10.44 | 1.72 | 75.26 | 4.62 | 1.9 | 11.1 | 1.8 | 80.3 | 4.9 | do | 1673 |
| 1674 | Procter Bread, raised in Missouri | 7.90 | 1.65 | 9.63 | 2.05 | 74.12 | 4.65 | 1.8 | 10.4 | 2.3 | 80.5 | 5.0 | U. S. Dept. Agr. Rep., 1883, p. 215 | 1674 |
| 1675 | Long John, raised in Missouri | 8.05 | 1.75 | 11.03 | 2.08 | 72.22 | 4.87 | 2.0 | 12.0 | 2.3 | 78.4 | 5.3 | do | 1675 |
| 1676 | Saint Charles, raised in Missouri | 8.20 | 1.75 | 8.23 | 3.10 | 72.43 | 6.29 | 2.0 | 8.9 | 3.4 | 78.8 | 6.9 | do | 1676 |
| 1677 | Snow Flake, raised in Missouri | 7.80 | 1.65 | 9.63 | 1.75 | 74.83 | 4.34 | 1.8 | 10.4 | 2.0 | 81.0 | 4.8 | do | 1677 |
| 1678 | Ragan White, raised in Missouri | 8.25 | 1.80 | 11.03 | 2.60 | 70.18 | 6.14 | 2.0 | 12.0 | 2.8 | 76.5 | 6.7 | do | 1678 |
| 1679 | Peabody, raised in Missouri | 7.95 | 2.05 | 9.98 | 2.60 | 69.93 | 7.49 | 2.2 | 10.9 | 2.8 | 75.9 | 8.2 | do | 1679 |
| 1680 | Badeau, raised in Missouri | 8.45 | 2.10 | 10.85 | 2.93 | 69.85 | 5.82 | 2.3 | 11.8 | 3.2 | 76.4 | 6.3 | do | 1680 |
| 1681 | Blount Prolific, raised in Missouri | 8.05 | 2.05 | 12.25 | 1.98 | 70.34 | 5.33 | 2.3 | 13.3 | 2.2 | 76.4 | 5.8 | do | 1681 |
| 1682 | Thompson, raised in Missouri | 8.30 | 1.80 | 12.60 | 2.58 | 69.78 | 4.94 | 2.0 | 13.7 | 2.8 | 76.0 | 5.5 | do | 1682 |
| 1683 | Ragan Yellow, raised in Missouri | 8.50 | 1.45 | 9.63 | 2.13 | 73.44 | 4.85 | 1.5 | 10.5 | 2.3 | 80.3 | 5.4 | do | 1683 |
| 1684 | Chester County, raised in Missouri | 8.05 | 1.45 | 10.85 | 2.65 | 70.69 | 6.31 | 1.6 | 11.8 | 2.9 | 76.9 | 6.8 | do | 1684 |
| 1685 | Golden Yellow, raised in Missouri | 8.30 | 1.60 | 10.50 | 1.43 | 72.79 | 5.38 | 1.7 | 11.4 | 1.6 | 79.4 | 5.9 | do | 1685 |
| 1686 | Pale Yellow, raised in Missouri | 8.55 | 1.65 | 9.80 | 2.55 | 72.23 | 5.16 | 1.9 | 10.7 | 2.8 | 78.9 | 5.7 | U. S. Dept. Agr. Rep., 1883, p. 216 | 1686 |
| 1687 | Golden Dent, raised in Missouri | 7.50 | 1.50 | 12.78 | 1.95 | 71.51 | 4.76 | 1.6 | 13.8 | 2.2 | 77.2 | 5.2 | do | 1687 |
| 1688 | Chester County Mammoth, raised in Missouri. | 7.60 | 1.85 | 10.33 | 2.95 | 70.34 | 6.93 | 2.1 | 11.1 | 3.2 | 76.2 | 7.4 | do | 1688 |
| 1689 | New Madrid, raised in Missouri | 7.40 | 1.50 | 10.68 | 2.65 | 71.96 | 5.81 | 1.6 | 11.5 | 2.9 | 77.7 | 6.3 | do | 1689 |
| 1690 | Early Yellow, raised in Missouri | 7.90 | 1.75 | 8.93 | 2.58 | 73.41 | 5.43 | 2.0 | 9.7 | 2.8 | 78.6 | 5.9 | do | 1690 |
| 1691 | Evans, raised in Missouri | 9.05 | 1.50 | 8.93 | 2.55 | 73.24 | 4.73 | 1.7 | 9.8 | 2.9 | 80.4 | 5.2 | do | 1691 |
| 1692 | Gold Dust, raised in Missouri | 8.75 | 1.55 | 11.55 | 2.28 | 70.92 | 4.95 | 1.8 | 12.7 | 2.5 | 77.5 | 5.5 | do | 1692 |
| 1693 | Bloody Butcher, raised in Missouri | 8.70 | 1.70 | 9.98 | 2.23 | 72.61 | 4.78 | 1.9 | 11.0 | 2.4 | 79.4 | 5.3 | do | 1693 |
| 1694 | Long Yellow, raised in Missouri | 8.80 | 1.30 | 9.98 | 2.00 | 73.04 | 4.88 | 1.4 | 11.0 | 2.2 | 80.0 | 5.4 | do | 1694 |
| 1695 | Jersey Red, raised in Missouri | 8.30 | 1.75 | 10.85 | 2.45 | 72.26 | 4.39 | 2.0 | 11.8 | 2.7 | 78.7 | 4.8 | do | 1695 |
| | Average, varieties raised in Missouri | **8.20** | **1.69** | **10.46** | **2.36** | **71.92** | **5.37** | **1.9** | **11.4** | **2.6** | **78.2** | **5.9** | | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1696 | Minnesota, raised in New York | 12.61 | 1.45 | 8.62 | 2.31 | 70.67 | 4.34 | 1.7 | 9.9 | 2.6 | 80.8 | 5.0 | N. Y. State Ex. Sta. Rep., 1884, p. 331. | 1696 |
| 1697 | White dent, raised in North Carolina | 6.74 | 1.43 | 11.03 | 1.53 | 74.09 | 5.18 | 1.5 | 11.8 | 1.6 | 79.6 | 5.5 | U. S. Dept. Agr. Rep., 1878, p. 148 | 1697 |
| 1698 | White Prolific, raised in Pennsylvania | 8.96 | 1.43 | 8.05 | 1.25 | 74.49 | 5.82 | 1.6 | 8.8 | 1.4 | 81.8 | 6.4 | do | 1698 |
| 1699 | Pride of the North, raised in Pennsylvania | 8.60 | 1.25 | 10.15 | 2.25 | 73.10 | 4.65 | 1.4 | 11.1 | 2.5 | 79.9 | 5.1 | U. S. Dept. Agr. Rep., 1883, p. 215 | 1699 |
| 1700 | Chester County Mammoth, raised in Pennsylvania. | 7.80 | 1.40 | 8.75 | 2.33 | 74.90 | 4.82 | 1.5 | 9.5 | 2.5 | 81.3 | 5.2 | do | 1700 |
| 1701 | Field corn, raised in Pennsylvania | 7.85 | 1.45 | 7.53 | 1.95 | 75.73 | 5.49 | 1.6 | 8.2 | 2.1 | 82.2 | 5.9 | do | 1701 |
| 1702 | Southern White, raised in South Carolina | 9.86 | 1.37 | 12.47 | 2.03 | 69.78 | 4.49 | 1.5 | 13.8 | 2.3 | 77.4 | 5.0 | Mass. Agr., 1879–'80, p. 240 | 1702 |
| 1703 | White and yellow dent cross, raised in Texas | 10.10 | 1.44 | 10.33 | 3.84 | 68.96 | 5.33 | 1.6 | 11.4 | 4.2 | 76.9 | 5.9 | U. S. Dept. Agr. Rep., 1883, p. 217 | 1703 |
| 1704 | White dent, raised in Texas | 9.70 | 1.70 | 11.03 | 3.22 | 69.25 | 5.10 | 1.9 | 12.3 | 3.5 | 76.7 | 5.6 | do | 1704 |
| 1705 | Red and yellow dent cross, raised in Texas | 10.00 | 1.40 | 9.98 | 1.82 | 71.38 | 5.42 | 1.6 | 11.1 | 2.0 | 79.3 | 6.0 | do | 1705 |
| 1706 | Yellow and white dent, raised in Texas | 10.36 | 1.04 | 10.68 | 2.61 | 70.02 | 5.29 | 1.1 | 11.9 | 2.9 | 78.2 | 5.9 | do | 1706 |
| 1707 | Red dent, raised in Texas | 10.44 | 1.44 | 10.15 | 2.68 | 69.67 | 5.62 | 1.6 | 11.4 | 3.0 | 77.7 | 6.3 | do | 1707 |
| 1708 | White, red, and yellow dent, raised in Texas | 10.52 | 1.60 | 9.80 | 4.81 | 68.07 | 5.20 | 1.8 | 10.9 | 5.4 | 76.1 | 5.8 | do | 1708 |
| 1709 | White dent, raised in Texas | 10.84 | 1.56 | 10.50 | 2.41 | 69.12 | 5.57 | 1.8 | 11.7 | 2.7 | 77.5 | 6.3 | do | 1709 |
| 1710 | Do | 10.60 | 1.32 | 10.85 | 4.17 | 67.74 | 5.32 | 1.5 | 12.2 | 4.7 | 75.7 | 5.9 | do | 1710 |
| 1711 | Yellow, red, and white dent, raised in Texas | 10.42 | 1.40 | 10.15 | 2.06 | 70.49 | 5.48 | 1.6 | 11.4 | 2.3 | 78.6 | 6.1 | do | 1711 |
| 1712 | White dent, raised in Texas | 10.20 | 1.63 | 10.68 | 2.31 | 69.92 | 5.26 | 1.8 | 11.8 | 2.6 | 77.9 | 5.9 | do | 1712 |
| 1713 | Red and white dent, raised in Texas | 10.14 | 1.38 | 10.33 | 2.40 | 70.78 | 4.97 | 1.6 | 11.4 | 2.7 | 78.7 | 5.6 | do | 1713 |
| 1714 | Yellow, red, and white dent, raised in Texas | 10.90 | 1.30 | 10.33 | 2.66 | 69.06 | 5.75 | 1.5 | 11.5 | 3.0 | 77.6 | 6.4 | do | 1714 |
| 1715 | Yellow, white, and red dent, raised in Texas | 10.05 | 1.49 | 10.68 | 2.23 | 70.19 | 5.36 | 1.7 | 11.8 | 2.4 | 78.1 | 6.0 | do | 1715 |
| 1716 | Yellow and white dent, raised in Texas | 9.27 | 1.38 | 10.15 | 2.14 | 70.95 | 6.11 | 1.5 | 11.2 | 2.3 | 78.3 | 6.7 | do | 1716 |
| 1717 | Yellow, white, and red dent, raised in Texas | 10.49 | 1.52 | 9.80 | 2.96 | 69.65 | 5.58 | 1.7 | 10.9 | 3.4 | 77.7 | 6.3 | do | 1717 |
| 1718 | White dent, raised in Texas | 10.50 | 1.42 | 10.68 | 2.55 | 69.34 | 5.51 | 1.6 | 11.9 | 2.9 | 77.5 | 6.1 | do | 1718 |
| 1719 | Yellow dent, raised in Texas | 11.98 | 1.32 | 11.03 | 2.73 | 67.79 | 5.15 | 1.4 | 12.5 | 3.1 | 77.1 | 5.9 | do | 1719 |
| 1720 | Yellow, red, and white dent, raised in Texas | 12.13 | 1.37 | 10.33 | 2.91 | 66.69 | 6.57 | 1.6 | 11.7 | 3.3 | 76.0 | 7.4 | do | 1720 |
| 1721 | White dent, raised in Texas | 11.82 | 1.18 | 10.15 | 2.76 | 68.63 | 5.46 | 1.3 | 11.5 | 3.2 | 77.9 | 6.1 | do | 1721 |
| | Average, varieties raised in Texas | **10.55** | **1.42** | **10.41** | **2.80** | **69.33** | **5.49** | **1.6** | **11.6** | **3.1** | **77.6** | **6.1** | | |
| 1722 | Yellow dent, raised in Wisconsin | 17.65 | 1.32 | 9.53 | 1.84 | 66.44 | 3.22 | 1.6 | 11.6 | 2.2 | 80.7 | 3.9 | Wis. Ex. Sta. Rep., 1888, p. 78 | 1722 |
| 1723 | Do | 15.78 | 2.64 | 10.30 | 1.33 | 65.90 | 4.05 | 3.1 | 12.2 | 1.6 | 78.3 | 4.8 | do | 1723 |
| 1724 | Do | 19.42 | 1.42 | 9.03 | 1.63 | 65.40 | 3.10 | 1.8 | 11.2 | 2.0 | 81.2 | 3.8 | do | 1724 |
| 1725 | White dent, raised in Wisconsin | 18.34 | 1.34 | 8.67 | 1.46 | 66.02 | 4.17 | 1.6 | 10.6 | 1.8 | 80.9 | 5.1 | do | 1725 |
| 1726 | Burrill and Whitman Ensilage, raised in Wisconsin. | 13.70 | 1.55 | 9.48 | 2.87 | 68.09 | 4.31 | 1.8 | 11.0 | 3.3 | 78.9 | 5.0 | do | 1726 |
| | Average, varieties raised in Wisconsin. | **16.98** | **1.65** | **9.40** | **1.82** | **66.38** | **3.77** | **2.9** | **11.3** | **2.1** | **79.1** | **4.6** | | |
| 1727 | Southern White, locality not given | 13.82 | 1.32 | 8.80 | 0.88 | 71.06 | 4.02 | 1.5 | 10.3 | 1.0 | 82.5 | 4.7 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 29. | 1727 |
| 1728 | Mexican White, locality not given† | 11.14 | 1.45 | 10.67 | 1.59 | 68.87 | 6.28 | 1.6 | 12.0 | 1.8 | 77.5 | 7.1 | U. S. Dept. Agr. Rep., 1878, p. 148 | 1728 |
| | All analyses, dent varieties. Maximum | 19.42 | 2.64 | 12.78 | 4.81 | 75.73 | 7.49 | 3.1 | 13.8 | 5.4 | 82.5 | 8.2 | | |
| | All analyses, dent varieties. Minimum | 6.22 | 1.04 | 7.53 | 0.88 | 65.40 | 3.10 | 1.3 | 8.2 | 1.4 | 75.9 | 3.8 | | |
| | All analyses, dent varieties. Average | **10.56** | **1.53** | **10.25** | **2.24** | **70.40** | **5.02** | **1.7** | **11.5** | **2.6** | **78.6** | **5.6** | | |

* Corn of preceding analysis roasted.

†*In loc. cit.*, sugar, gum, and albuminoids soluble and insoluble in alcohol are given.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen free extract. | Fat. | | |
| | GRAIN AND OTHER SEEDS—Continued. | | | | | | | | | | | | | |
| | Corn (maize) kernels, flint varieties: | % | % | % | % | % | % | % | % | % | % | % | | |
| 1729 | Blount Prolific, raised in Colorado | 10.59 | 1.50 | 9.80 | 2.35 | 70.19 | 5.66 | 1.8 | 10.9 | 2.6 | 78.4 | 6.3 | U. S. Dept. Agr., 1883, p. 216 | 1729 |
| 1730 | Vermont White Cap, raised in Connecticut | 10.86 | 1.53 | 11.06 | 1.04 | 71.22 | 4.29 | 1.7 | 12.4 | 1.2 | 79.9 | 4.8 | Conn. State Ex. Sta. Rep., 1878, p. 67 | 1730 |
| 1731 | Rowley, raised in Connecticut | 11.00 | 1.61 | 11.63 | 0.78 | 70.15 | 4.83 | 1.8 | 13.1 | 0.9 | 78.8 | 5.4 | do | 1731 |
| 1732 | Yellow or Canada, 8-rowed, raised in Connecticut. | 15.10 | 1.36 | 10.01 | 1.24 | 66.99 | 5.31 | 1.6 | 11.6 | 1.7 | 78.9 | 6.2 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 29. | 1732 |
| 1733 | Old-Fashioned Yellow, raised in Connecticut. | 10.58 | 1.43 | 9.81 | 1.39 | 72.11 | 4.68 | 1.6 | 11.0 | 1.6 | 80.6 | 5.2 | Conn. State Ex. Sta. Rep., 1879, p. 88 | 1733 |
| 1734 | King Philip, raised in Connecticut | 15.97 | 1.35 | 10.31 | 1.37 | 66.50 | 4.50 | 1.6 | 12.3 | 1.6 | 79.1 | 5.4 | Conn. State Ex. Sta. Rep., 1880, p. 81 | 1734 |
| 1735 | Common yellow, raised in Connecticut | 15.77 | 1.26 | 10.00 | 1.47 | 67.06 | 4.44 | 1.5 | 11.9 | 1.7 | 79.6 | 5.3 | do | 1735 |
| 1736 | White flint, raised in Connecticut | 16.82 | 1.19 | 8.94 | 1.32 | 67.84 | 3.89 | 1.4 | 10.7 | 1.6 | 81.6 | 4.7 | do | 1736 |
| 1737 | Flint, raised in Connecticut | 18.16 | 1.43 | 9.60 | 1.47 | 64.95 | 4.39 | 1.8 | 11.7 | 1.8 | 79.4 | 5.3 | Conn. State Ex. Sta. Rep., 1881, p. 83 | 1737 |
| 1738 | Canada Snub corn, raised in Connecticut | 16.66 | 1.03 | 8.94 | 0.78 | 68.55 | 4.04 | 1.2 | 10.7 | 0.9 | 82.3 | 4.9 | Conn. State Ex. Sta. Rep., 1884, p. 106 | 1738 |
| 1739 | Canada Yellow corn, raised in Connecticut | 16.50 | 1.32 | 9.87 | 0.91 | 66.58 | 4.82 | 1.6 | 11.8 | 1.1 | 79.7 | 5.8 | do | 1739 |
| 1740 | Rhode Island White Cap, raised in Connecticut. | 8.71 | 1.23 | 11.06 | 1.07 | 72.28 | 5.65 | 1.3 | 12.2 | 1.2 | 79.2 | 6.1 | Conn. State Ex. Sta. Rep., 1887, p. 119 | 1740 |
| | Average, varieties raised in Connecticut. | **14.19** | **1.34** | **10.11** | **1.17** | **68.57** | **4.62** | **1.5** | **11.8** | **1.3** | **80.0** | **5.4** | | |
| 1741 | Flint corn, raised in Maine | 19.60 | 1.40 | 7.91 | 1.78 | 65.06 | 4.25 | 1.7 | 9.8 | 2.2 | 81.0 | 5.3 | Maine Ex. Sta. Rep., 1885–'86, p. 51 | 1741 |
| 1742 | Wheeler Prolific, raised in Massachusetts | 12.69 | 1.39 | 12.06 | 1.82 | 67.46 | 4.58 | 1.6 | 13.8 | 2.1 | 77.3 | 5.2 | Mass. Agr., 1879–'80, p. 238 | 1742 |
| 1743 | Clark, raised in Massachusetts | 12.12 | 1.64 | 12.12 | 2.46 | 66.91 | 4.75 | 1.9 | 13.8 | 2.8 | 76.1 | 5.4 | Mass. Agr., 1879–'80, p. 239 | 1743 |
| 1744 | Tip, raised in Massachusetts | 8.86 | 1.57 | 12.85 | 2.53 | 68.93 | 5.26 | 1.7 | 14.1 | 2.8 | 75.6 | 5.8 | do | 1744 |
| 1745 | Canada, raised in Massachusetts | 13.44 | 1.27 | 12.02 | 2.40 | 66.51 | 4.56 | 1.5 | 13.9 | 2.8 | 76.5 | 5.3 | Mass. Agr., 1879–'80, p. 241 | 1745 |
| 1746 | Canada Dutton, raised in Massachusetts | 14.36 | 1.42 | 10.33 | 2.38 | 66.51 | 5.00 | 1.7 | 12.1 | 2.8 | 77.6 | 5.8 | Mass. Agr., 1879–'80, p. 242 | 1746 |
| 1747 | Massachusetts Red, raised in Massachusetts | 11.95 | 1.10 | 12.06 | 2.02 | 69.47 | 3.40 | 1.3 | 13.7 | 2.3 | 78.8 | 3.9 | Communicated by analyst, S. P. Sharples; not published. | 1747 |
| 1748 | Massachusetts White, raised in Massachusetts. | 10.22 | 1.44 | 9.22 | 1.47 | 74.24 | 3.40 | 1.6 | 10.3 | 1.7 | 82.6 | 3.8 | do | 1748 |
| 1749 | Waushakum, raised in Massachusetts | 13.05 | 1.29 | 10.69 | 1.11 | 69.80 | 4.06 | 1.5 | 12.3 | 1.3 | 80.2 | 4.7 | U. S. Census, 1880, vol. III, p. 415 | 1749 |
| 1750 | No. 1749, roasted, raised in Massachusetts | 4.53 | 1.41 | 11.06 | 1.35 | 76.74 | 4.91 | 1.5 | 11.6 | 1.4 | 80.4 | 5.1 | do | 1750 |
| 1751 | Topover, raised in Massachusetts | 11.55 | 1.30 | 12.39 | 1.73 | 67.18 | 5.85 | 1.5 | 14.0 | 2.0 | 75.9 | 6.6 | Mass. Ex. Sta. Rep., 1885, p. 81 | 1751 |
| 1752 | Canada, raised in Massachusetts | 9.76 | 1.60 | 10.38 | 1.97 | 70.53 | 5.76 | 1.8 | 11.5 | 2.2 | 78.1 | 6.4 | Mass. Ex. Sta. Rep., 1887, p. 99 | 1752 |
| 1753 | Adams White, 12-rowed, raised in Massachusetts. | 10.96 | 1.39 | 7.90 | 1.98 | 72.99 | 4.78 | 1.6 | 8.9 | 2.2 | 81.9 | 5.4 | do | 1753 |
| | Average, varieties raised in Massachusetts. | **11.12** | **1.40** | **11.09** | **1.93** | **69.77** | **4.69** | **1.6** | **12.4** | **2.1** | **78.6** | **5.3** | | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1754 | Smut Nose, raised in Michigan | 12.90 | 1.54 | 11.81 | 2.00 | 66.81 | 4.94 | 1.8 | 13.6 | 2.3 | 76.6 | 5.7 | Mich. Bd. Agr. Rep., 1878, p. 409 | 1754 |
| 1755 | Do | 13.26 | 1.49 | 11.51 | 2.49 | 66.11 | 5.14 | 1.7 | 13.3 | 2.9 | 76.2 | 5.9 | do | 1755 |
| 1756 | Eight-rowed flint, raised in Michigan | 13.45 | 1.43 | 12.00 | 2.26 | 66.03 | 4.83 | 1.7 | 13.9 | 2.6 | 76.3 | 5.5 | do | 1756 |
| 1757 | Sanford, raised in Michigan | 13.37 | 1.37 | 10.69 | 2.10 | 67.41 | 5.06 | 1.6 | 12.3 | 2.4 | 77.8 | 5.9 | do | 1757 |
| | Average, varieties raised in Michigan | **13.24** | **1.46** | **11.50** | **2.21** | **66.60** | **4.99** | **1.7** | **13.2** | **2.5** | **76.8** | **5.8** | | |
| 1758 | White flint, raised in Missouri | 7.60 | 1.55 | 11.90 | 2.50 | 71.52 | 4.93 | 1.7 | 12.8 | 2.7 | 77.5 | 5.3 | U. S. Dept. Agr. Rep., 1883, p. 215 | 1758 |
| 1759 | Pennsylvania, raised in Missouri | 8.25 | 1.55 | 9.98 | 1.90 | 74.27 | 4.05 | 1.7 | 10.9 | 2.1 | 80.9 | 4.4 | do | 1759 |
| 1760 | Early Canada, raised in Missouri | 8.70 | 1.45 | 10.68 | 2.00 | 72.50 | 4.67 | 1.6 | 11.7 | 2.2 | 79.4 | 5.1 | do | 1760 |
| 1761 | Adams, raised in New Hampshire * | 8.61 | 1.57 | 10.50 | 1.19 | 73.30 | 4.83 | 1.7 | 11.5 | 1.3 | 80.2 | 5.3 | U. S. Dept. Agr. Rep., 1878, p. 149 | 1761 |
| 1762 | Canada, raised in New Hampshire* | 8.27 | 1.72 | 11.36 | 1.26 | 71.79 | 5.60 | 1.9 | 12.4 | 1.4 | 78.3 | 6.0 | do | 1762 |
| 1763 | Small 12-rowed, raised in New Hampshire* | 11.48 | 1.34 | 10.50 | 1.09 | 69.56 | 6.03 | 1.5 | 11.9 | 1.2 | 78.6 | 6.8 | do | 1763 |
| 1764 | State Fair Premium, raised in New Hampshire.* | 10.19 | 1.78 | 10.82 | 1.06 | 70.86 | 5.29 | 2.0 | 12.1 | 1.2 | 78.9 | 5.8 | do | 1764 |
| 1765 | Large Premium, raised in New Hampshire* | 10.00 | 1.46 | 11.36 | 1.09 | 70.57 | 5.52 | 1.6 | 12.6 | 1.2 | 78.4 | 6.2 | do | 1765 |
| 1766 | Board of Agriculture, raised in New Hampshire.* | 11.09 | 1.31 | 11.55 | 0.82 | 70.55 | 4.68 | 1.5 | 13.0 | 0.9 | 79.4 | 5.2 | do | 1766 |
| 1767 | King Philip, raised in New Hampshire* | 10.23 | 1.34 | 12.08 | 1.01 | 67.79 | 7.05 | 2.0 | 13.5 | 1.1 | 75.5 | 7.9 | do | 1767 |
| 1768 | Small 8-rowed, raised in New Hampshire* | 11.05 | 1.57 | 13.65 | 1.30 | 67.63 | 4.80 | 1.8 | 15.3 | 1.5 | 76.0 | 5.4 | U. S. Dept. Agr. Rep., 1878, p. 148 | 1768 |
| 1769 | Miscegenation (white and blue), raised in New Hampshire.* | 9.92 | 1.63 | 11.72 | 1.05 | 70.35 | 5.33 | 1.8 | 13.0 | 1.2 | 78.1 | 5.9 | do | 1769 |
| 1770 | Pitch Knot, raised in New Hampshire* | 11.24 | 1.52 | 11.20 | 1.04 | 69.74 | 5.26 | 1.7 | 12.6 | 1.2 | 78.6 | 5.9 | do | 1770 |
| 1771 | Tom Thumb (yellow), raised in New Hampshire.* | 9.05 | 1.60 | 12.60 | 1.33 | 69.53 | 5.89 | 1.7 | 13.9 | 1.4 | 76.5 | 6.5 | do | 1771 |
| | Average, varieties raised in New Hampshire. | **10.10** | **1.53** | **11.58** | **1.11** | **70.20** | **5.48** | **1.7** | **12.8** | **1.2** | **78.2** | **6.1** | | |
| 1772 | Corn, upper ear, raised in New York | 10.66 | 1.21 | 10.77 | 1.16 | 71.02 | 5.18 | 1.3 | 11.9 | 1.3 | 79.7 | 5.8 | N. Y. State Ex. Sta. Rep., 1883, p. 151 | 1772 |
| 1773 | Corn, lower ear, raised in New York | 9.37 | 1.14 | 9.74 | 1.12 | 73.42 | 5.21 | 1.3 | 10.8 | 1.2 | 81.0 | 5.7 | do | 1773 |
| 1774 | Corn, upper ear, raised in New York | 8.50 | 1.27 | 10.86 | 0.67 | 74.00 | 4.70 | 1.4 | 11.8 | 0.8 | 80.9 | 5.1 | do | 1774 |
| 1775 | Corn, lower ear, raised in New York | 8.82 | 1.26 | 9.91 | 1.11 | 74.54 | 4.36 | 1.4 | 11.0 | 1.2 | 81.6 | 4.8 | do | 1775 |
| 1776 | Wanshakum, raised in New York | 11.91 | 1.38 | 11.12 | 1.91 | 68.66 | 5.02 | 1.5 | 12.6 | 2.2 | 78.0 | 5.7 | N. Y. State Ex. Sta. Rep., 1884, p. 331 | 1776 |
| 1777 | Oregon White, raised in Oregon* | 9.25 | 1.46 | 7.88 | 1.26 | 73.07 | 7.08 | 1.1 | 8.7 | 1.4 | 81.0 | 7.8 | U. S. Dept. Agr. Rep., 1878, p. 148 | 1777 |
| 1778 | Compton Early, raised in Pennsylvania* | 6.59 | 1.64 | 9.90 | 2.09 | 74.48 | 5.30 | 1.8 | 10.6 | 2.2 | 79.7 | 5.7 | U. S. Dept. Agr. Rep., 1878, p. 149 | 1778 |
| 1779 | White Prolific, raised in Pennsylvania* | 8.96 | 1.43 | 8.05 | 1.25 | 74.49 | 5.82 | 1.6 | 8.8 | 1.4 | 81.8 | 6.4 | U. S. Dept. Agr. Rep., 1878, p. 215 | 1779 |
| 1780 | Improved Prolific, raised in Tennessee* | 7.58 | 1.23 | 9.29 | 2.65 | 74.16 | 5.09 | 1.3 | 10.1 | 2.9 | 80.2 | 5.5 | U. S. Dept. Agr. Rep., 1878, p. 148 | 1780 |
| 1781 | Wild Goose, raised in Texas* | 8.40 | 1.45 | 10.33 | 2.20 | 72.71 | 4.91 | 1.6 | 11.1 | 2.4 | 78.6 | 5.3 | U. S. Dept. Agr. Rep., 1883, p. 215 | 1781 |
| 1782 | Vermont, raised in Vermont | 8.64 | 1.45 | 10.14 | 1.38 | 72.76 | 5.63 | 1.6 | 11.1 | 1.5 | 79.6 | 6.2 | U. S. Dept. Agr. Rep., 1878, p. 149 | 1782 |
| 1783 | Yakima City, raised in Washington Territory. | 10.30 | 1.50 | 8.40 | 2.88 | 71.19 | 5.73 | 1.7 | 9.4 | 3.2 | 79.4 | 6.3 | U. S. Dept. Agr. Rep., 1883, p. 217 | 1783 |
| 1784 | Variety unknown, raised in Wisconsin *a* | 13.06 | 1.60 | 10.36 | 1.39 | 68.42 | 5.17 | 1.8 | 11.9 | 1.6 | 78.7 | 6.0 | Wis. Ex. Sta. Rep., 1888, p. 78 | 1784 |
| 1785 | King Philip, raised in Wisconsin *a* | 13.30 | 1.18 | 9.56 | 1.57 | 70.64 | 3.75 | 1.4 | 11.0 | 1.8 | 81.5 | 4.3 | do | 1785 |
| 1786 | Variety unknown | 12.60 | 1.49 | 9.93 | 1.99 | 67.50 | 6.49 | 1.7 | 11.4 | 2.3 | 77.2 | 7.4 | do | 1786 |
| 1787 | Early Dutton, 12-rowed, kernels rather small, locality not given. | 8.08 | 1.52 | 9.62 | 2.52 | 72.62 | 5.64 | 1.7 | 10.5 | 2.7 | 79.0 | 6.1 | Am. Jour. Sci. and Arts, 1869, p. 352 | 1787 |

* *In loc cit.*, sugar, gum, and albuminoids soluble and insoluble in alcohol are given.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GRAIN AND OTHER SEEDS—Continued. | | | | | | | | | | | | | |
| | Corn (maize) kernels, flint varieties—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 1788 | Common Yellow or Canada, 8-rowed, kernels good size, locality not given. | 10.52 | 1.31 | 9.72 | 2.40 | 71.63 | 4.42 | 1.5 | 10.9 | 2.7 | 80.0 | 4.9 | Am. Jour. Sci. and Arts, 1869, p. 352.. | 1788 |
| 1789 | King Philip or Rhode Island, 8-rowed, kernels large. | 9.79 | 1.60 | 11.87 | 2.21 | 70.08 | 4.45 | 1.8 | 13.2 | 2.4 | 77.7 | 4.9 | .....do ..... | 1789 |
| 1790 | Yellow or Canada, locality not given ..... | 15.10 | 1.36 | 10.01 | 1.24 | 66.99 | 5.31 | 1.6 | 11.6 | 1.7 | 78.9 | 6.2 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 29. | 1790 |
| 1791 | Western Yellow, locality not given..... | 13.93 | 1.25 | 8.82 | 1.59 | 70.49 | 3.92 | 1.5 | 10.2 | 1.9 | 81.9 | 4.5 | .....do ..... | 1791 |
| 1792 | White Mexican, locality not given*..... | 8.65 | 1.87 | 10.15 | 1.64 | 72.79 | 4.90 | 2.0 | 11.1 | 1.8 | 79.7 | 5.4 | U. S. Dept. Agr. Rep., 1878, p. 148..... | 1792 |
| 1793 | Yellow corn, locality not given ..... | 9.86 | 1.92 | 10.85 | 2.38 | 70.36 | 4.63 | 2.1 | 12.0 | 2.6 | 78.1 | 5.2 | U. S. Dept. Agr. Rep., 1881–'82, p. 553. | 1793 |
| 1794 | Queen of the Prairie, locality not given..... | 9.40 | 1.55 | 10.15 | 2.85 | 71.06 | 4.29 | 1.7 | 12.0 | 3.1 | 78.4 | 4.8 | U. S. Dept. Agr. Rep., 1883, p. 217 .... | 1794 |
| 1795 | Mexican No. 9 locality not given ..... | 8.35 | 1.75 | 7.00 | 2.03 | 73.74 | 7.13 | 1.9 | 7.7 | 2.2 | 80.4 | 7.8 | .....do ..... | 1795 |
| 1796 | Mexican, locality not given..... | 7.95 | 1.30 | 8.40 | 2.20 | 74.62 | 5.53 | 1.4 | 9.1 | 2.4 | 81.1 | 6.0 | .....do ..... | 1796 |
| | All analyses, flint varieties. Maximum | 19.60 | 1.92 | 13.65 | 2.88 | 76.74 | 7.13 | 2.1 | 14.0 | 3.2 | 82.7 | 7.9 | | |
| | All analyses, flint varieties. Minimum | 4.53 | 1.03 | 7.00 | 0.67 | 64.95 | 3.40 | 1.1 | 7.7 | 0.8 | 75.5 | 4.3 | | |
| | All analyses, flint varieties. Average | **11.31** | **1.44** | **10.52** | **1.65** | **70.09** | **4.99** | **1.7** | **11.8** | **1.9** | **79.0** | **5.6** | | |
| | Corn (maize) kernels, sweet varieties: | | | | | | | | | | | | | |
| 1797 | Stowell Evergreen, raised in Connecticut... | 10.86 | 1.89 | 11.10 | 2.63 | 65.86 | 7.66 | 2.1 | 12.5 | 3.0 | 73.8 | 8.6 | Am. Jour. Sci. and Arts, 1869, p. 352.. | 1797 |
| 1798 | Immature corn..... | 10.12 | 2.19 | 14.50 | 2.57 | 62.70 | 7.92 | 2.4 | 16.1 | 2.9 | 69.8 | 8.8 | Conn. State Ex. Sta. Rep., 1878, p. 67. | 1798 |
| 1799 | Boiling corn ..... | 10.09 | 2.08 | 15.31 | 2.52 | 61.78 | 8.22 | 2.3 | 17.0 | 2.8 | 68.8 | 9.1 | .....do ..... | 1899 |
| 1800 | Full grown corn ..... | 9.45 | 2.06 | 14.38 | 1.93 | 63.05 | 9.13 | 2.3 | 15.9 | 2.1 | 69.6 | 10.1 | .....do ..... | 1800 |
| 1801 | Mammoth, raised in Connecticut..... | 9.43 | 1.93 | 12.32 | 2.75 | 66.09 | 7.48 | 2.1 | 13.6 | 3.0 | 73.0 | 8.3 | Conn. State Ex. Sta. Rep., 1879, p. 88. | 1801 |
| 1802 | Sugar corn, raised in Kansas ..... | 10.76 | 1.90 | 10.33 | 3.10 | 65.85 | 8.06 | 2.1 | 11.6 | 3.5 | 73.8 | 9.0 | U. S. Dept. Agr. Rep., 1878, p. 148.... | 1802 |
| 1803 | Egyptian, raised in Maryland*..... | 7.54 | 1.92 | 11.55 | 2.02 | 69.17 | 7.80 | 2.1 | 12.6 | 2.2 | 74.6 | 8.5 | .....do ..... | 1803 |
| 1804 | Golden Sugar, raised in Massachusetts*.... | 6.27 | 1.93 | 14.35 | 1.58 | 66.70 | 9.17 | 2.1 | 15.3 | 1.7 | 71.1 | 9.8 | .....do ..... | 1804 |
| 1805 | Marblehead Mammoth, raised in Massachusetts.* | 6.47 | 1.92 | 12.78 | 1.88 | 67.95 | 9.00 | 2.1 | 13.7 | 2.0 | 72.6 | 9.6 | .....do ..... | 1805 |
| 1806 | Procter, raised in Massachusetts *..... | 10.13 | 1.92 | 12.08 | 1.75 | 66.17 | 7.95 | 2.1 | 13.4 | 2.0 | 73.7 | 8.8 | .....do ..... | 1806 |
| 1807 | Blue Texas, raised in Massachusetts ..... | 7.74 | 1.60 | 13.86 | 2.56 | 65.54 | 8.70 | 1.7 | 15.0 | 2.8 | 71.1 | 9.4 | Mass. Agr., 1879–'80, p. 240 ..... | 1807 |
| 1808 | Crosby, raised in Massachusetts..... | 10.50 | 1.77 | 11.60 | 2.47 | 66.75 | 6.91 | 2.0 | 13.0 | 2.8 | 74.5 | 7.7 | Mass. Agr., 1879–'80, p. 245 ..... | 1808 |
| 1809 | Yellow Sweet, raised in Massachusetts.... | 10.90 | 1.92 | 12.24 | 2.30 | 68.85 | 3.79 | 2.2 | 12.6 | 2.6 | 78.3 | 4.3 | Mass. State Ex. Sta. Rep., 1886, p. 41. | 1809 |
| | Average, varieties raised in Massachusetts. | **8.7** | **1.8** | **12.8** | **2.1** | **67.0** | **7.6** | **2.0** | **14.0** | **2.3** | **73.4** | **8.3** | | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1810 | Red River, raised in Minnesota* | 9.13 | 1.89 | 11.73 | 1.46 | 66.48 | 9.31 | 2.1 | 12.9 | 1.6 | 73.2 | 10.2 | U. S. Dept. Agr. Rep., 1878, p. 148 | 1810 |
| 1811 | Eight-rowed, raised in New York* | 10.10 | 1.66 | 10.10 | 2.44 | 67.56 | 8.14 | 1.9 | 11.3 | 2.7 | 75.0 | 9.1 | N. Y. State Ex. Sta. Rep., 1884, p. 331. | 1811 |
| 1812 | Black Sugar, raised in Pennsylvania | 8.50 | 1.90 | 11.38 | 3.53 | 65.81 | 8.88 | 2.1 | 12.4 | 3.9 | 71.9 | 9.7 | U. S. Dept. Agr. Rep., 1883, p. 218 | 1812 |
| 1813 | Darling Sugar, raised in Pennsylvania | 7.80 | 1.95 | 10.50 | 3.03 | 67.64 | 9.08 | 2.1 | 11.4 | 3.3 | 73.4 | 9.8 | do | 1813 |
| 1814 | Egyptian, raised in Pennsylvania | 7.40 | 1.70 | 11.73 | 3.08 | 68.01 | 8.08 | 1.8 | 12.7 | 3.3 | 73.5 | 8.7 | do | 1814 |
| 1815 | Stowell Evergreen, raised in Pennsylvania | 7.00 | 2.35 | 11.73 | 4.58 | 62.45 | 11.89 | 2.5 | 12.6 | 4.9 | 67.2 | 12.8 | do | 1815 |
| 1816 | Do | 7.85 | 2.25 | 9.45 | 3.50 | 69.12 | 7.83 | 2.4 | 10.3 | 3.8 | 75.0 | 8.5 | do | 1816 |
| 1817 | Roslyn Hybrid, raised in Pennsylvania | 7.85 | 1.75 | 9.98 | 5.24 | 66.41 | 8.77 | 1.9 | 10.8 | 5.7 | 72.1 | 9.5 | do | 1817 |
| 1818 | Early Minnesota, raised in Pennsylvania | 9.50 | 2.10 | 10.58 | 3.14 | 65.56 | 9.12 | 2.3 | 11.7 | 3.5 | 72.4 | 10.1 | do | 1818 |
| 1819 | Egyptian, raised in Pennsylvania | 8.10 | 2.15 | 9.98 | 3.76 | 68.05 | 7.96 | 2.3 | 10.9 | 4.1 | 74.0 | 8.7 | do | 1819 |
| | **Average, varieties raised in Pennsylvania.** | **8.00** | **2.02** | **10.67** | **3.73** | **66.63** | **8.95** | **2.2** | **11.6** | **4.0** | **72.4** | **9.8** | | |
| 1820 | Prolific, locality not given* | 10.38 | 1.87 | 10.33 | 2.04 | 67.73 | 7.65 | 2.1 | 11.5 | 2.3 | 75.6 | 8.5 | U. S. Dept. Agr. Rep., 1878, p. 148 | 1820 |
| 1821 | Mexican Blue, locality not given* | 8.97 | 1.42 | 10.21 | 1.80 | 72.35 | 5.25 | 1.6 | 11.2 | 2.0 | 79.4 | 5.8 | do | 1821 |
| 1822 | Stowell Evergreen, locality not given* | 5.98 | 1.92 | 11.91 | 2.66 | 69.53 | 8.00 | 2.0 | 12.7 | 2.8 | 74.0 | 8.5 | do | 1822 |
| 1823 | Burr, locality not given | 10.68 | 2.22 | 11.69 | 4.94 | 62.70 | 7.77 | 2.5 | 13.1 | 5.5 | 70.2 | 8.7 | Communicated by analyst, S. P. Sharples. | 1823 |
| | All analyses, sweet varieties. Maximum | 10.86 | 2.35 | 15.31 | 5.24 | 72.35 | 11.90 | 2.5 | 17.0 | 5.5 | 79.4 | 12.8 | | |
| | All analyses, sweet varieties. Minimum | 5.98 | 1.42 | 9.45 | 1.46 | 61.78 | 3.79 | 1.6 | 10.3 | 1.6 | 67.2 | 4.3 | | |
| | All analyses, sweet varieties. Average | **8.82** | **1.92** | **11.62** | **2.79** | **66.72** | **8.13** | **2.1** | **12.8** | **3.1** | **73.2** | **8.8** | | |
| | Corn (maize) kernels, pop varieties: | | | | | | | | | | | | | |
| 1824 | White pop* | 8.61 | 1.63 | 13.13 | 2.32 | 68.68 | 5.63 | 1.8 | 14.4 | 2.5 | 75.1 | 6.2 | U. S. Dept. Agr. Rep., 1878, p. 149 | 1824 |
| 1825 | White and yellow pop | 12.55 | 1.28 | 10.34 | 1.16 | 70.49 | 4.18 | 1.5 | 11.8 | 1.3 | 80.6 | 4.8 | U. S. Census, 1880, vol. III, p. 418 | 1825 |
| 1826 | White and yellow pop, No. 1825 popped | 4.10 | 1.40 | 11.06 | 1.44 | 77.26 | 4.74 | 1.5 | 11.5 | 1.5 | 80.6 | 4.9 | do | 1826 |
| 1827 | White pop | 11.84 | 1.24 | 9.69 | 1.22 | 71.09 | 4.92 | 1.4 | 11.0 | 1.4 | 80.6 | 5.6 | do | 1827 |
| 1828 | White pop, No. 1827 popped | 4.38 | 1.35 | 10.25 | 1.26 | 77.34 | 5.42 | 1.4 | 10.7 | 1.3 | 80.9 | 5.7 | do | 1828 |
| 1829 | Pearl pop | 9.84 | 1.74 | 11.72 | 2.34 | 68.38 | 5.98 | 1.9 | 13.0 | 2.6 | 75.9 | 6.6 | N. Y. State Ex. Sta. Rep., 1884, p. 331 | 1829 |
| | Pop varieties, Nos. 1824, 1825, 1827, and 1829. Maximum | 12.60 | 1.74 | 13.13 | 2.34 | 71.09 | 5.98 | 1.9 | 14.4 | 2.6 | 80.9 | 6.6 | | |
| | Pop varieties, Nos. 1824, 1825, 1827, and 1829. Minimum | 8.61 | 1.24 | 9.69 | 1.16 | 68.38 | 4.18 | 1.4 | 11.0 | 1.3 | 75.1 | 4.8 | | |
| | Pop varieties, Nos. 1824, 1825, 1827, and 1829. Average | **10.71** | **1.47** | **11.22** | **1.76** | **69.66** | **5.18** | **1.7** | **12.5** | **2.0** | **78.0** | **5.8** | | |
| | Corn (maize) kernels, soft varieties: | | | | | | | | | | | | | |
| 1830 | Tuscarora | 11.25 | 1.47 | 11.44 | 1.28 | 68.82 | 5.74 | 1.7 | 12.9 | 1.4 | 77.5 | 6.5 | Conn. State Ex. Sta. Rep., 1878, p. 67. | 1830 |
| 1831 | Do | 14.08 | 1.52 | 10.86 | 1.80 | 65.97 | 5.77 | 1.8 | 12.6 | 2.1 | 76.8 | 6.7 | Mich. Bd. Agr., 1878, p. 409 | 1831 |
| 1832 | Do | 7.70 | 1.85 | 11.38 | 2.08 | 71.65 | 5.34 | 2.0 | 12.3 | 2.3 | 77.6 | 5.8 | U. S. Dept. Agr. Rep., 1883, p. 215 | 1832 |
| 1833 | Do | 7.17 | 1.41 | 8.82 | 1.59 | 75.50 | 5.51 | 1.5 | 9.5 | 1.7 | 81.4 | 5.9 | N. Y. State Ex. Sta. Rep., 1884, p. 331 | 1833 |
| 1834 | Zuni Black | 6.09 | 1.60 | 14.56 | 3.25 | 69.50 | 5.00 | 1.7 | 15.5 | 5.5 | 74.0 | 5.3 | N. Y. State Ex. Sta. Rep., 1885, p. 304 | 1834 |
| | All analyses, soft varieties. Maximum | 14.08 | 1.85 | 14.56 | 3.25 | 75.50 | 5.74 | 2.0 | 15.5 | 5.5 | 81.4 | 6.7 | | |
| | All analyses, soft varieties. Minimum | 6.09 | 1.41 | 8.82 | 1.28 | 65.97 | 5.00 | 1.5 | 9.5 | 1.4 | 74.0 | 5.3 | | |
| | All analyses, soft varieties. Average | **9.26** | **1.57** | **11.41** | **2.00** | **70.29** | **5.47** | **1.8** | **12.5** | **2.2** | **77.4** | **6.1** | | |

* *In loc cit.*, sugar, gum, and albuminoids, soluble and insoluble in alcohol are given.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | Referenees to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GRAIN AND OTHER SEEDS—Continued. | | | | | | | | | | | | | |
| | Corn (maize) kernels, unclassified: | % | % | % | % | % | % | % | % | % | % | % | | |
| 1835 | Variety unknown, grown in Illinois | 13.61 | 1.35 | 9.19 | 3.13 | 69.10 | 3.62 | 1.6 | 10.6 | 3.6 | 80.0 | 4.2 | Communicated by analyst, S. P. Sharples. | 1835 |
| 1836 | Golden 8-rowed, grown in Massachusetts | 12.51 | 1.58 | 10.25 | 1.35 | 69.37 | 4.97 | 1.8 | 11.7 | 1.5 | 79.3 | 5.7 | do | 1836 |
| 1837 | Red, grown in New Mexico | 10.85 | 1.60 | 11.09 | 1.60 | 68.97 | 5.89 | 1.8 | 12.5 | 1.8 | 77.3 | 6.6 | do | 1837 |
| 1838 | Kansas corn, grown in New Mexico | 11.34 | 1.07 | 8.81 | 1.28 | 72.90 | 4.60 | 1.2 | 9.9 | 1.4 | 82.3 | 5.2 | do | 1838 |
| 1839 | Western corn | 20.68 | 1.19 | 7.83 | 1.65 | 64.95 | 3.70 | 1.5 | 9.9 | 2.1 | 81.8 | 4.7 | Conn. State Ex. Sta. Rep., 1880, p. 81. | 1839 |
| 1840 | Do | 20.22 | 1.16 | 8.54 | 1.67 | 64.86 | 3.55 | 1.5 | 10.7 | 2.1 | 81.2 | 4.5 | do | 1840 |
| 1841 | Do | 16.41 | 1.25 | 8.57 | 1.76 | 68.16 | 3.85 | 1.5 | 10.3 | 2.1 | 81.6 | 4.5 | do | 1841 |
| 1842 | White corn, grown in New Mexico | 10.92 | 1.58 | 10.06 | 1.75 | 70.10 | 5.59 | 1.8 | 11.3 | 2.0 | 78.6 | 6.3 | U. S. Census, 1880, vol. III, p. 420 | 1842 |
| 1843 | Nebraska red corn, grown in Massachusetts | 10.74 | 1.29 | 12.64 | 3.00 | 66.93 | 5.40 | 1.4 | 14.2 | 3.4 | 74.9 | 6.1 | Mass. State Ex. Sta. Rep., 1883, p. 68. | 1843 |
| 1844 | Corn No. 10, grown in New York | 12.84 | 1.15 | 7.52 | 0.98 | 73.88 | 3.63 | 1.4 | 8.6 | 1.1 | 84.8 | 4.1 | N. Y. State Ex. Sta. Bul. 70 | 1844 |
| 1845 | Hampden Prolific, grown in Massachusetts | 11.43 | 1.53 | 10.06 | 1.92 | 71.06 | 4.00 | 1.7 | 11.4 | 2.2 | 80.2 | 4.5 | Mass. State Ex. Sta. Bul. 14, 1884 | 1845 |
| 1846 | Do | 8.02 | 1.45 | 12.73 | 1.82 | 71.11 | 4.87 | 1.7 | 13.7 | 2.0 | 77.3 | 5.3 | do | 1846 |
| 1847 | Western yellow | 13.93 | 1.25 | 8.82 | 1.59 | 70.49 | 3.92 | 1.5 | 10.2 | 1.9 | 81.9 | 4.5 | Kans. Agr. Col. Rep., 1884, p. 5 | 1847 |
| 1848 | Variety unknown | 10.39 | 2.03 | 10.88 | 1.83 | 69.65 | 5.22 | 2.3 | 12.1 | 2.0 | 77.7 | 5.9 | Vt. Ex. Sta. Rep., 1887, p. 136 | 1848 |
| 1849 | No 2 High mixed, analyzed in December* | 20.00 | 1.25 | 8.06 | 1.54 | 65.38 | 3.77 | 1.6 | 10.1 | 1.9 | 81.7 | 4.7 | Conn. State Ex. Sta. Rep., 1888, p. 150. | 1849 |
| 1850 | Good Western corn, analyzed in December* | 19.73 | 1.06 | 8.68 | 1.61 | 64.87 | 4.05 | 1.3 | 10.7 | 2.0 | 81.0 | 5.0 | do | 1850 |
| 1851 | Mason County yellow corn, best quality, analyzed in December.* | 20.30 | 1.10 | 8.40 | 1.38 | 65.20 | 3.62 | 1.4 | 10.5 | 1.7 | 82.0 | 4.4 | do | 1851 |
| 1852 | New York corn, analyzed in December † | 14.64 | 1.12 | 9.30 | 1.42 | 69.57 | 3.95 | 1.2 | 8.4 | 1.6 | 84.1 | 4.7 | do | 1852 |
| 1853 | No. 2 High mixed, analyzed in December † | 13.09 | 1.20 | 9.40 | 1.53 | 70.67 | 4.11 | 1.3 | 10.8 | 1.8 | 81.4 | 4.7 | do | 1853 |
| | All analyses, all varieties of corn kernels. Minimum | 20.68 | 2.64 | 15.31 | 5.24 | 76.74 | 11.89 | 3.1 | 17.0 | 5.7 | 84.8 | 12.8 | | |
| | All analyses, all varieties of corn kernels. Maximum | 4.50 | 1.03 | 7.00 | 0.67 | 61.78 | 3.10 | 1.1 | 7.7 | 0.8 | 67.2 | 3.8 | | |
| | All analyses, all varieties of corn kernels. Average | **10.89** | **1.52** | **10.49** | **2.05** | **69.70** | **5.35** | **1.7** | **11.7** | **2.4** | **78.1** | **6.1** | | |
| | Corn (maize) kernels, field-cured, dent varieties: | | | | | | | | | | | | | |
| 1854 | Yellow Dent *c* | 33.50 | 1.06 | 6.25 | 0.93 | 55.33 | 2.93 | 1.6 | 9.4 | 1.4 | 83.2 | 4.4 | Mass. State Ex. Sta. Rep., 1889, p. 147 | 1854 |
| 1855 | Do. *c* | 32.49 | 1.26 | 7.38 | 1.00 | 53.21 | 3.66 | 1.9 | 11.1 | 1.5 | 80.0 | 5.5 | do | 1855 |
| 1856 | Do. *c* | 28.75 | 0.85 | 6.62 | 1.21 | 58.94 | 3.63 | 1.2 | 9.3 | 1.7 | 82.7 | 5.1 | do | 1856 |
| | White-Edged Dent, crop of 1888—‡ | | | | | | | | | | | | | |
| 1857 | One stalk in 4 feet *h i j* | 36.17 | 1.07 | 7.95 | 0.95 | 50.29 | 3.57 | 1.7 | 12.6 | 1.5 | 78.6 | 5.6 | Conn. State Ex. Sta. Rep., 1889, p. 24 | 1857 |
| 1858 | One stalk in 2 feet *h i j* | 31.00 | 1.05 | 8.28 | 1.11 | 54.57 | 3.99 | 1.5 | 12.0 | 1.6 | 79.3 | 5.6 | do | 1858 |
| 1859 | One stalk to a foot *h i j* | 37.37 | 9.91 | 6.38 | 0.96 | 50.78 | 3.60 | 1.5 | 10.2 | 1.6 | 81.0 | 5.7 | do | 1859 |
| 1860 | Two stalks to a foot *h i j* | 32.40 | 0.78 | 6.23 | 1.19 | 55.51 | 3.89 | 1.2 | 9.2 | 1.8 | 82.0 | 5.8 | do | 1860 |
| 1861 | Two stalks to a foot (extra phosphate) *h i j* | 36.63 | 0.78 | 6.01 | 1.00 | 52.01 | 3.57 | 1.2 | 9.5 | 1.5 | 82.2 | 5.6 | do | 1861 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1862 | Four stalks to a foot *h i j* | 37.85 | 0.77 | 4.82 | 0.97 | 52.15 | 3.44 | 1.2 | 7.8 | 1.5 | 84.0 | 5.5 | ....do | 1862 |
| 1863 | Four stalks to a foot (extra phosphate) *h i j* | 35.97 | 0.69 | 4.40 | 0.91 | 54.50 | 3.53 | 1.1 | 6.9 | 1.4 | 85.1 | 5.5 | ....do | 1863 |
| 1864 | Eight stalks to a foot *h i j* | 37.17 | 0.79 | 5.46 | 0.93 | 52.23 | 3.42 | 1.2 | 8.7 | 1.4 | 83.3 | 5.4 | ....do | 1864 |
| | White-Edged Dent, crop of 1889—‡ | | | | | | | | | | | | | |
| 1865 | One stalk in 4 feet *h i j* | 32.99 | 1.08 | 8.15 | 1.77 | 52.22 | 3.79 | 1.5 | 12.2 | 2.7 | 77.9 | 5.7 | Conn. State Ex. Sta. Rep., 1889, p. 222 | 1865 |
| 1866 | One stalk in 2 feet *h i j* | 33.52 | 1.04 | 7.76 | 1.52 | 52.28 | 3.88 | 1.5 | 11.7 | 2.3 | 78.7 | 5.8 | ....do | 1866 |
| 1867 | One stalk to a foot *h i j* | 31.19 | 0.93 | 5.78 | 1.57 | 57.03 | 3.50 | 1.3 | 8.5 | 2.3 | 82.6 | 5.3 | ....do | 1867 |
| 1868 | Two stalks to a foot *h i j* | 28.91 | 0.77 | 5.87 | 1.39 | 59.40 | 3.66 | 1.1 | 8.2 | 2.0 | 83.5 | 5.2 | ....do | 1868 |
| 1869 | Four stalks to a foot *h i j* | 34.68 | 0.72 | 5.20 | 1.39 | 54.73 | 3.28 | 1.1 | 7.9 | 2.1 | 83.9 | 5.0 | ....do | 1869 |
| 1870 | Eight stalks to a foot *h i j* | 39.28 | 0.69 | 5.28 | 1.35 | 50.45 | 2.95 | 1.2 | 8.7 | 2.2 | 83.0 | 4.9 | ....do | 1870 |
| | Analyses, field-cured kernels, dent varieties. Maximum | 39.28 | 1.26 | 8.28 | 1.77 | 59.40 | 3.99 | 1.9 | 12.6 | 2.7 | 85.1 | 5.8 | | |
| | Minimum | 28.75 | 0.69 | 4.40 | 0.91 | 50.29 | 2.93 | 1.1 | 6.9 | 1.4 | 77.9 | 4.4 | | |
| | Average | **34.17** | **0.89** | **6.34** | **1.18** | **53.88** | **3.51** | **1.3** | **9.6** | **1.8** | **81.9** | **5.4** | | |
| | From small and immature ears: | | | | | | | | | | | | | |
| 1871 | Variety unknown, 2.05 per cent of the stover. *a*.† | 17.70 | 1.35 | 6.71 | 1.81 | 68.17 | 4.25 | 1.6 | 7.7 | 2.2 | 81.9 | 5.1 | Pa. Ex. Sta. Rep., 1887, p. 154 | 1871 |
| | White-Edged Dent—‡ | | | | | | | | | | | | | |
| 1872 | One stalk in 4 feet *h i j* | 57.53 | 0.91 | 5.44 | 0.89 | 33.46 | 1.77 | 2.2 | 12.8 | 2.1 | 78.6 | 4.3 | Conn. State Ex. Sta. Rep., 1889, p. 24. | 1872 |
| 1873 | One stalk in 2 feet *h i j* | 31.21 | 1.20 | 8.56 | 1.03 | 54.06 | 3.94 | 1.7 | 12.4 | 1.5 | 78.7 | 5.7 | ....do | 1873 |
| 1874 | One stalk to a foot *h i j* | 34.00 | 1.04 | 8.00 | 1.06 | 52.24 | 3.66 | 1.6 | 12.2 | 1.6 | 79.0 | 5.6 | ....do | 1874 |
| 1875 | Two stalks to a foot *h i j* | 37.36 | 0.97 | 7.30 | 1.10 | 50.05 | 3.22 | 1.6 | 11.4 | 1.8 | 80.0 | 5.2 | ....do | 1875 |
| 1876 | Two stalks to a foot (extra phosphate) *h i j* | 40.16 | 0.83 | 6.78 | 1.08 | 47.72 | 3.43 | 1.3 | 11.3 | 1.7 | 80.0 | 5.7 | ....do | 1876 |
| 1877 | Four stalks to a foot *h i j* | 37.20 | 0.73 | 6.27 | 0.93 | 51.48 | 3.39 | 1.1 | 10.0 | 1.4 | 82.1 | 5.4 | ....do | 1877 |
| 1878 | Four stalks to a foot (extra phosphate) *h i j* | 37.89 | 0.80 | 6.23 | 1.10 | 50.45 | 3.53 | 1.3 | 10.2 | 1.8 | 81.0 | 5.7 | ....do | 1878 |
| 1879 | Eight stalks to a foot *h i j* | 36.12 | 0.73 | 5.52 | 0.97 | 52.90 | 3.76 | 1.1 | 8.6 | 1.7 | 83.2 | 5.4 | ....do | 1879 |
| | All analyses, excluding No. 1871. Maximum | 57.53 | 1.20 | 8.56 | 1.10 | 54.06 | 3.94 | 2.2 | 12.8 | 2.1 | 83.2 | 5.7 | | |
| | Minimum | 31.21 | 0.73 | 5.44 | 0.89 | 33.46 | 1.77 | 1.1 | 8.6 | 1.4 | 78.6 | 4.3 | | |
| | Average | **38.93** | **0.89** | **6.83** | **1.02** | **48.99** | **3.34** | **1.5** | **11.1** | **2.0** | **80.0** | **5.4** | | |
| | Corn (maize) kernels, field-cured, flint varieties: | | | | | | | | | | | | | |
| | Variety unknown, raised with— | | | | | | | | | | | | | |
| 1880 | No fertilizer *h i j* | 27.42 | 1.38 | 9.07 | 1.37 | 56.91 | 3.85 | 1.9 | 12.5 | 1.9 | 78.4 | 5.2 | Storrs School Ex. Sta. Rep., 1889, p. 149. | 1880 |
| 1881 | Nitrate of soda *h i j* | 30.80 | 1.32 | 8.86 | 1.59 | 53.91 | 3.52 | 1.9 | 12.8 | 2.3 | 77.9 | 5.1 | ....do | 1881 |
| 1882 | Dissolved boneblack *h i j* | 29.22 | 1.41 | 9.42 | 1.49 | 54.73 | 3.75 | 2.0 | 13.3 | 2.1 | 77.3 | 5.3 | ....do | 1882 |
| 1883 | Muriate of potash *h i j* | 28.35 | 1.36 | 7.31 | 1.29 | 57.68 | 4.01 | 1.9 | 10.2 | 1.8 | 80.5 | 5.6 | ....do | 1883 |
| 1884 | Nitrate of soda, dissolved boneblack *h i j* | 28.93 | 1.42 | 8.81 | 1.14 | 54.80 | 4.99 | 2.0 | 12.4 | 1.6 | 77.1 | 6.9 | ....do | 1884 |
| 1885 | Nitrate of soda, muriate of potash *h i j* | 27.96 | 1.51 | 7.49 | 1.37 | 57.13 | 4.54 | 2.1 | 10.4 | 1.9 | 79.3 | 6.3 | ....do | 1885 |
| 1886 | Dissolved boneblack, muriate of potash (mixed minerals) *h i j* | 27.19 | 1.31 | 7.06 | 1.24 | 58.62 | 4.58 | 1.8 | 9.7 | 1.7 | 80.5 | 6.3 | ....do | 1886 |
| | Mixed minerals as in No. 1886— | | | | | | | | | | | | | |
| 1887 | nitrate of soda one-third ration *h i j* | 26.85 | 1.53 | 7.69 | 1.46 | 57.20 | 5.27 | 2.1 | 10.5 | 2.0 | 78.2 | 7.2 | ....do | 1887 |
| 1888 | nitrate of soda two-thirds ration *h i j* | 27.43 | 1.52 | 8.20 | 1.45 | 56.25 | 5.15 | 2.1 | 11.3 | 2.0 | 77.5 | 7.1 | ....do | 1888 |
| 1889 | nitrate of soda full ration *h i j* | 27.96 | 1.51 | 7.13 | 1.30 | 57.06 | 5.04 | 2.1 | 9.9 | 1.8 | 79.2 | 7.0 | ....do | 1889 |

* New crop. † Old crop. ‡ Rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GRAIN AND OTHER SEEDS—Continued. | | | | | | | | | | | | | |
| | Corn (maize) kernels, field-cured, flint varieties—Continued. | | | | | | | | | | | | | |
| | Variety unknown, raised with— | | | | | | | | | | | | | |
| | Mixed minerals as in No. 1886—Cont'd. | % | % | % | % | % | % | % | % | % | % | % | | |
| 1890 | sulphate of ammonia one-third ration *h i j* | 26.99 | 1.31 | 6.57 | 1.24 | 59.14 | 4.75 | 1.8 | 9.0 | 1.7 | 81.0 | 6.5 | Storrs School Ex. Sta. Rep., 1889, p. 149. | 1890 |
| 1891 | sulphate of ammonia two-thirds ration *h i j* | 28.13 | 1.29 | 6.40 | 1.15 | 58.14 | 4.89 | 1.8 | 8.9 | 1.6 | 80.9 | 6.8 | ....do | 1891 |
| 1892 | sulphate of ammonia full ration *h i j* | 27.78 | 1.37 | 8.01 | 1.30 | 57.06 | 4.48 | 1.9 | 11.1 | 1.8 | 79.0 | 6.2 | ....do | 1892 |
| 1893 | dried blood one-third ration *h i j* | 28.30 | 1.43 | 7.02 | 1.36 | 56.95 | 4.94 | 2.0 | 9.8 | 1.9 | 79.4 | 6.9 | ....do | 1893 |
| 1894 | dried blood two-thirds ration *h i j* | 27.66 | 1.30 | 6.58 | 1.30 | 58.90 | 4.26 | 1.8 | 9.1 | 1.8 | 81.4 | 5.9 | ....do | 1894 |
| 1895 | dried blood full ration *h i j* | 28.04 | 1.36 | 6.62 | 1.36 | 58.23 | 4.39 | 1.9 | 9.2 | 1.9 | 80.9 | 6.1 | ....do | 1895 |
| 1896 | No fertilizer *h i j* | 29.72 | 1.47 | 8.01 | 1.61 | 54.97 | 4.22 | 2.1 | 11.4 | 2.3 | 78.2 | 6.0 | Storrs School Ex. Sta. Rep., 1889, p. 153. | 1896 |
| 1897 | Dissolved boneblack *h i j* | 27.62 | 1.30 | 7.52 | 1.52 | 58.28 | 3.76 | 1.8 | 10.4 | 2.1 | 80.5 | 5.2 | ....do | 1897 |
| 1898 | Muriate of potash *h i j* | 29.75 | 1.20 | 7.30 | 1.48 | 56.83 | 3.44 | 1.7 | 10.4 | 2.1 | 80.1 | 4.9 | ....do | 1898 |
| 1899 | Dissolved boneblack, muriate of potash (mixed minerals) *h i j* | 30.06 | 1.54 | 7.61 | 1.54 | 54.49 | 4.76 | 2.2 | 10.9 | 2.2 | 77.9 | 6.8 | ....do | 1899 |
| | Mixed minerals as in No. 1899— | | | | | | | | | | | | | |
| 1900 | nitrate of soda one-third ration *h i j* | 27.26 | 1.31 | 7.64 | 1.53 | 58.04 | 4.22 | 1.8 | 10.5 | 2.1 | 79.8 | 5.8 | ....do | 1900 |
| 1901 | nitrate of soda two-thirds ration *h i j* | 28.89 | 1.28 | 7.82 | 1.49 | 56.40 | 4.12 | 1.8 | 11.0 | 2.1 | 79.3 | 5.8 | ....do | 1901 |
| 1902 | nitrate of soda full ration *h i j* | 28.85 | 1.63 | 7.96 | 1.62 | 55.61 | 4.33 | 2.3 | 11.2 | 2.2 | 78.2 | 6.1 | ....do | 1902 |
| 1903 | sulphate of ammonia one-third ration *h i j* | 29.72 | 1.34 | 7.24 | 1.69 | 55.93 | 4.08 | 1.9 | 10.3 | 2.4 | 79.6 | 5.8 | ....do | 1903 |
| 1904 | sulphate of ammonia two-thirds ration *h i j* | 28.41 | 1.36 | 8.66 | 1.64 | 55.71 | 4.22 | 1.9 | 12.1 | 2.3 | 77.8 | 5.9 | ....do | 1904 |
| 1905 | sulphate of ammonia full ration *h i j* | 26.92 | 1.46 | 8.40 | 1.54 | 57.00 | 4.68 | 2.0 | 11.5 | 2.1 | 78.0 | 6.4 | ....do | 1905 |
| 1906 | dried blood one-third ration *h i j* | 27.50 | 1.38 | 7.32 | 1.45 | 58.22 | 4.13 | 1.9 | 10.1 | 2.0 | 80.3 | 5.7 | ....do | 1906 |
| 1907 | dried blood two-thirds ration *h i j* | 27.70 | 1.16 | 6.94 | 1.37 | 59.22 | 3.61 | 1.6 | 9.6 | 1.9 | 81.9 | 5.0 | ....do | 1907 |
| 1908 | dried blood full ration *h i j* | 28.98 | 1.28 | 7.31 | 1.49 | 56.90 | 4.04 | 1.8 | 10.3 | 2.1 | 80.1 | 5.7 | ....do | 1908 |
| 1909 | No fertilizer *h i j* | 23.22 | 1.47 | 8.52 | 1.53 | 61.19 | 4.07 | 1.9 | 11.1 | 2.0 | 79.7 | 5.3 | Storrs School Ex. Sta. Rep., 1889, p. 157. | 1909 |
| 1910 | Nitrate of soda *h i j* | 22.64 | 1.62 | 9.21 | 1.62 | 60.42 | 4.49 | 2.1 | 11.9 | 2.1 | 78.1 | 5.8 | ....do | 1910 |
| 1911 | Dissolved boneblack *h i j* | 24.39 | 1.36 | 8.39 | 1.59 | 60.34 | 3.93 | 1.8 | 11.1 | 2.1 | 79.8 | 5.2 | ....do | 1911 |
| 1912 | Muriate of potash *h i j* | 24.44 | 1.36 | 8.38 | 1.43 | 60.46 | 3.93 | 1.8 | 11.1 | 1.9 | 80.0 | 5.2 | ....do | 1912 |
| 1913 | Nitrate of soda, dissolved boneblack *h i j* | 22.54 | 1.39 | 8.83 | 1.46 | 61.91 | 3.87 | 1.8 | 11.4 | 1.9 | 79.9 | 5.0 | ....do | 1913 |
| 1914 | Nitrate of soda, muriate of potash *h i j* | 22.75 | 1.62 | 9.27 | 1.55 | 60.79 | 4.02 | 2.1 | 12.0 | 2.0 | 78.7 | 5.2 | ....do | 1914 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1915 | Dissolved boneblack, muriate of potash *h i j* | 23.76 | 1.37 | 8.46 | 1.37 | 61.46 | 3.58 | 1.8 | 11.1 | 1.8 | 80.6 | 4.7 | ....do | 1915 |
| 1916 | Nitrate of soda, dissolved boneblack, muriate of potash *h i j* | 23.11 | 1.31 | 8.38 | 1.38 | 61.98 | 3.84 | 1.7 | 10.9 | 1.8 | 80.6 | 5.0 | ....do | 1916 |
| 1917 | Plaster | 21.98 | 1.32 | 8.26 | 1.32 | 63.69 | 3.43 | 1.7 | 10.6 | 1.7 | 81.6 | 4.4 | ....do | 1917 |
| | Rhode Island White Cap—* | | | | | | | | | | | | | |
| 1918 | One stalk in 4 feet *h i j* | 26.58 | 1.15 | 10.55 | 0.86 | 56.78 | 4.08 | 1.6 | 14.4 | 1.1 | 77.6 | 5.3 | Conn. State Ex. Sta. Rep., 1889, p. 24. | 1918 |
| 1919 | One stalk in 2 feet *h i j* | 28.06 | 0.92 | 9.61 | 0.84 | 56.83 | 3.74 | 1.3 | 13.3 | 1.1 | 79.2 | 5.1 | ....do | 1919 |
| 1920 | One stalk to a foot *h i j* | 27.04 | 1.06 | 8.57 | 0.85 | 58.39 | 4.09 | 1.4 | 11.7 | 1.2 | 80.2 | 5.5 | ....do | 1920 |
| 1921 | Two stalks to a foot *h i j* | 29.38 | 0.86 | 8.52 | 0.90 | 56.31 | 4.03 | 1.2 | 12.0 | 1.3 | 79.8 | 5.7 | ....do | 1921 |
| 1922 | Four stalks to a foot *h i j* | 27.27 | 1.18 | 5.55 | 0.81 | 60.96 | 4.23 | 1.6 | 7.6 | 1.1 | 83.9 | 5.8 | ....do | 1922 |
| 1923 | Eight stalks to a foot (extra fertilizer) *h i j* | 32.11 | 0.62 | 6.19 | 0.85 | 56.38 | 3.85 | 0.9 | 9.0 | 1.3 | 83.1 | 5.7 | ....do | 1923 |
| 1924 | Yellow Flint *c* | 23.26 | 1.38 | 6.52 | 0.84 | 64.39 | 3.61 | 1.8 | 8.5 | 1.1 | 83.9 | 4.7 | Mass. State Ex. Sta. Rep., 1889, p. 147 | 1924 |
| 1925 | Do. *c* | 29.87 | 1.40 | 8.13 | 0.70 | 56.18 | 3.72 | 2.0 | 11.6 | 1.0 | 80.1 | 5.3 | ....do | 1925 |
| 1926 | Yellow and White Flint *c* | 22.36 | 1.09 | 10.40 | 1.09 | 61.18 | 3.88 | 1.4 | 13.4 | 1.4 | 78.8 | 5.0 | ....do | 1926 |
| 1927 | White Flint *c* | 24.98 | 1.56 | 9.22 | 0.96 | 59.32 | 3.96 | 2.1 | 12.3 | 1.3 | 79.0 | 5.3 | ....do | 1927 |
| | Field-cured kernels, flint varieties. Maximum | 32.11 | 1.63 | 10.55 | 1.64 | 64.39 | 5.27 | 2.3 | 14.4 | 2.4 | 83.9 | 7.2 | | |
| | Field-cured kernels, flint varieties. Minimum | 21.98 | 0.62 | 5.55 | 0.70 | 53.91 | 3.43 | 0.9 | 7.6 | 1.0 | 77.1 | 4.4 | | |
| | Field-cured kernels, flint varieties. Average | **27.09** | **1.34** | **7.97** | **1.32** | **58.10** | **4.18** | **1.7** | **10.9** | **1.8** | **79.8** | **5.8** | | |
| | From small and immature ears:* | | | | | | | | | | | | | |
| | Rhode Island White Cap— | | | | | | | | | | | | | |
| 1928 | One stalk in 4 feet *h i j* | 23.95 | 1.02 | 10.26 | 0.76 | 59.74 | 4.27 | 1.4 | 13.4 | 1.0 | 78.6 | 5.6 | Conn. State Ex. Sta. Rep., 1889, p. 24 | 1928 |
| 1929 | One stalk in 2 feet *h i j* | 27.70 | 0.94 | 9.70 | 0.94 | 56.87 | 3.85 | 1.3 | 12.6 | 1.3 | 79.5 | 5.3 | ....do | 1929 |
| 1930 | One stalk to a foot *h i j* | 30.80 | 0.96 | 9.81 | 0.79 | 53.67 | 3.97 | 1.4 | 14.1 | 1.1 | 77.7 | 5.7 | ....do | 1930 |
| 1931 | Two stalks to a foot *h i j* | 74.80 | 0.37 | 3.25 | 0.30 | 19.89 | 1.39 | 1.5 | 13.0 | 1.0 | 79.0 | 5.5 | ....do | 1931 |
| 1932 | Four stalks to a foot *h i j* | 26.68 | 1.01 | 8.52 | 0.98 | 58.79 | 4.02 | 1.4 | 11.6 | 1.5 | 79.9 | 5.6 | ....do | 1932 |
| 1933 | Eight stalks to a foot *h i j* | 24.94 | 0.74 | 7.05 | 0.77 | 62.52 | 3.98 | 1.0 | 9.4 | 1.0 | 83.2 | 5.4 | ....do | 1933 |
| 1934 | Eight stalks to a foot (extra fertilizer) *h i j* | 32.80 | 0.70 | 6.66 | 0.83 | 55.53 | 3.48 | 1.0 | 10.0 | 1.2 | 82.6 | 5.2 | ....do | 1934 |
| | Maximum | 74.80 | 1.02 | 10.26 | 0.98 | 62.52 | 4.27 | 1.5 | 14.1 | 1.5 | 83.2 | 5.7 | | |
| | Minimum | 23.95 | 0.37 | 3.25 | 0.30 | 19.89 | 1.39 | 1.0 | 9.4 | 1.0 | 77.7 | 5.2 | | |
| | Average | **34.52** | **0.82** | **7.89** | **0.77** | **52.43** | **3.57** | **1.3** | **11.9** | **1.2** | **80.6** | **5.0** | | |
| | Sorghum: | | | | | | | | | | | | | |
| 1935 | Early Amber | 10.57 | 1.81 | 9.98 | 1.48 | 71.58 | 4.60 | 2.0 | 11.2 | 1.6 | 80.0 | 5.2 | U. S. Dept. Agr. Rep., 1879, p. 64 | 1935 |
| 1936 | Chinese | 9.93 | 1.47 | 9.54 | 1.52 | 73.59 | 3.95 | 1.6 | 10.6 | 1.7 | 81.7 | 4.4 | ....do | 1936 |
| 1937 | Variety unknown | 16.76 | 2.17 | 7.67 | 3.21 | 66.81 | 3.36 | 2.6 | 9.2 | 3.9 | 80.3 | 4.0 | Conn. State Ex. Sta. Rep., 1881, p. 82 | 1937 |
| 1938 | Minnesota Early Amber, grown in Massachusetts. | 15.04 | 1.73 | 8.13 | 1.94 | 69.65 | 3.51 | 2.0 | 9.6 | 2.3 | 82.0 | 4.1 | ....do | 1938 |
| 1939 | Variety unknown | 12.93 | 1.53 | 8.69 | 1.66 | 71.38 | 3.81 | 1.7 | 10.0 | 1.9 | 82.0 | 4.4 | N. J. Ex. Sta. Rep., 1881, p. 52 | 1939 |
| 1940 | Do | 12.71 | 1.37 | 8.06 | 1.70 | 72.49 | 3.67 | 1.6 | 9.3 | 1.9 | 82.9 | 4.3 | ....do | 1940 |
| 1941 | Do | 12.97 | 1.38 | 8.44 | 1.62 | 71.70 | 3.89 | 1.6 | 9.6 | 1.8 | 82.5 | 4.5 | ....do | 1941 |
| 1942 | Do | 12.50 | 1.40 | 8.13 | 1.71 | 72.27 | 3.99 | 1.6 | 9.3 | 1.9 | 82.6 | 4.6 | ....do | 1942 |

*Rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GRAIN AND OTHER SEEDS—Continued. | | | | | | | | | | | | | |
| | Sorghum—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 1943 | Variety unknown | 9.28 | 3.34 | 11.25 | 2.06 | 71.95 | 2.12 | 3.6 | 12.4 | 2.2 | 79.5 | 2.3 | N. J. Ex. Sta. Rep., 1881, p. 52 | 1943 |
| 1944 | Chicken corn (*Sorghum vulgare*) | 44.87 | 4.30 | 10.62 | 8.70 | 58.95 | 2.65 | 5.1 | 12.4 | 10.3 | 69.0 | 3.2 | Miss. Ex. Sta Bul. 8, 1890 | 1944 |
| | All analyses, excluding No. 1944. Maximum | 16.76 | 4.30 | 11.25 | 8.70 | 73.59 | 4.60 | 5.1 | 12.4 | 10.3 | 82.9 | 5.2 | | |
| | All analyses, excluding No. 1944. Minimum | 9.28 | 1.37 | 7.67 | 1.48 | 58.95 | 2.12 | 1.6 | 9.3 | 1.6 | 69.0 | 2.3 | | |
| | All analyses, excluding No. 1944. Average | **12.75** | **2.05** | **9.05** | **2.56** | **70.04** | **3.55** | **2.4** | **10.4** | **3.0** | **80.1** | **4.1** | | |
| 1945 | Broom corn *b* | 8.88 | 4.88 | 10.69 | 73.38 | | 2.57 | 4.9 | 11.7 | 80.5 | | 2.9 | N. J. Ex. Sta. Rep., 1885, p. 166 | 1945 |
| 1946 | Do | 14.10 | 1.98 | 9.62 | 7.13 | 63.64 | 3.52 | 2.3 | 11.2 | 8.3 | 74.1 | 4.1 | Mass. State Ex. Sta. Rep., 1887, p. 100 | 1946 |
| 1947 | Brown dhoura | 7.62 | 1.68 | 9.01 | 1.52 | 75.99 | 4.18 | 1.8 | 9.8 | 1.6 | 82.3 | 4.5 | U. S. Dept. Agr. Rep., 1879, p. 101 | 1947 |
| 1948 | Do | 12.61 | 1.63 | 11.45 | | 74.31 | | 1.8 | 13.1 | | 85.1 | | Univ. Tenn. experimental work of Agr. Dept., 1881, p. 163. | 1948 |
| 1949 | Do | 12.74 | 1.42 | 10.46 | | 75.38 | | 1.6 | 12.0 | | 86.4 | | ....do | 1949 |
| 1950 | Chinese corn | 7.87 | 1.46 | 9.63 | 1.79 | 75.50 | 3.75 | 1.6 | 10.5 | 2.0 | 81.8 | 4.1 | U. S. Dept. Agr. Rep., 1879, p. 101 | 1950 |
| | Oats: | | | | | | | | | | | | | |
| 1951 | Variety unknown, raised in Connecticut | 12.36 | 3.03 | 8.00 | 12.89 | 59.02 | 4.70 | 3.5 | 9.1 | 14.7 | 67.3 | 5.4 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 27. | 1951 |
| 1952 | Variety unknown, raised in Connecticut | 9.40 | 2.80 | 10.06 | 9.67 | 62.30 | 5.77 | 3.1 | 11.1 | 10.6 | 68.8 | 6.4 | U. S. Census, 1880, vol. III, p. 415 | 1952 |
| 1953 | Do | 9.27 | 2.92 | 9.47 | 10.11 | 62.68 | 5.55 | 3.2 | 10.4 | 11.2 | 69.1 | 6.1 | ....do | 1953 |
| 1954 | Do | 10.72 | 2.60 | 9.19 | 8.88 | 63.15 | 5.46 | 2.9 | 10.3 | 9.9 | 70.8 | 6.1 | ....do | 1954 |
| 1955 | Do | 10.30 | 2.97 | 9.25 | 9.87 | 62.31 | 5.30 | 3.3 | 10.3 | 11.0 | 69.5 | 5.9 | ....do | 1955 |
| 1956 | Do | 10.86 | 3.06 | 9.88 | 8.94 | 61.88 | 5.38 | 3.4 | 11.1 | 10.0 | 69.4 | 6.1 | ....do | 1956 |
| 1957 | Do | 13.48 | 3.46 | 9.38 | 9.28 | 59.52 | 4.88 | 4.0 | 10.9 | 10.8 | 68.6 | 5.7 | Conn. State Ex. Sta. Rep., 1881, p. 83. | 1957 |
| | Average, varieties raised in Connecticut. | **10.94** | **2.95** | **9.32** | **9.95** | **61.55** | **5.29** | **3.4** | **10.5** | **11.2** | **69.0** | **5.9** | | |
| 1958 | White, raised in Dakota | 11.94 | 3.55 | 13.00 | 7.64 | 58.38 | 5.49 | 4.0 | 14.8 | 8.7 | 66.3 | 6.2 | U. S. Census, 1880, vol. III, p. 415 | 1958 |
| 1959 | Do | 11.55 | 3.25 | 12.06 | 7.23 | 60.20 | 5.71 | 3.7 | 13.6 | 8.2 | 68.0 | 6.5 | ....do | 1959 |
| 1960 | No. 1, White, raised in Illinois | 11.23 | 2.91 | 11.54 | 12.18 | 57.08 | 5.06 | 3.3 | 13.0 | 13.7 | 64.3 | 5.7 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 27. | 1960 |
| 1961 | Bedford, raised in Massachusetts | 9.81 | 3.36 | 12.13 | 9.37 | 60.92 | 4.41 | 3.7 | 10.4 | 10.4 | 67.6 | 4.9 | U. S. Census, 1880, vol. III, p. 415 | 1961 |
| 1962 | Variety unknown, raised in Michigan | 12.04 | 3.20 | 10.69 | 8.71 | 61.04 | 4.32 | 3.6 | 12.2 | 9.9 | 69.4 | 4.9 | ....do | 1962 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1963 | Chinese Hulless, raised in Minnesota | 10.57 | 2.01 | 14.10 | 1.47 | 66.89 | 4.96 | 2.2 | 15.8 | 1.6 | 74.9 | 5.5 | do | 1963 |
| 1964 | Variety unknown, raised in New Hampshire | 10.77 | 3.15 | 11.56 | 9.66 | 60.47 | 4.39 | 3.5 | 13.0 | 10.8 | 67.8 | 4.9 | do | 1964 |
| 1965 | State, raised in New York | 11.03 | 2.88 | 10.28 | 8.76 | 61.80 | 5.25 | 3.2 | 11.6 | 9.8 | 69.5 | 5.9 | do | 1965 |
| 1966 | White State, raised in New York | 10.72 | 3.00 | 11.31 | 8.77 | 61.26 | 4.94 | 3.4 | 12.7 | 9.8 | 68.6 | 5.5 | do | 1966 |
| 1967 | Variety unknown | 10.56 | 2.92 | 13.22 | 7.37 | 61.06 | 4.87 | 3.3 | 14.8 | 8.2 | 68.3 | 5.4 | do | 1967 |
| 1968 | Schoenen, raised in New York | 9.16 | 2.36 | 14.40 | 10.31 | 59.09 | 4.68 | 2.6 | 15.9 | 11.4 | 64.9 | 5.2 | do | 1968 |
| 1969 | Probsteier, raised in New York | 9.72 | 2.91 | 13.06 | 8.10 | 61.44 | 4.77 | 3.2 | 14.5 | 9.0 | 68.0 | 5.3 | do | 1969 |
| 1970 | White Probsteier, raised in New York | 8.91 | 3.22 | 13.69 | 9.44 | 60.65 | 4.09 | 3.5 | 15.0 | 10.4 | 66.6 | 4.5 | do | 1970 |
| 1971 | Long Island, raised in New York | 10.31 | 2.82 | 11.34 | 10.79 | 60.26 | 4.48 | 3.1 | 12.6 | 12.0 | 67.3 | 5.0 | do | 1971 |
| | Average, varieties raised in New York. | **10.06** | **2.89** | **12.47** | **9.08** | **60.78** | **4.72** | **3.2** | **13.9** | **10.1** | **67.6** | **5.2** | | |
| 1972 | Variety unknown, raised in Wisconsin | 12.77 | 3.06 | 12.34 | 10.31 | 58.15 | 3.37 | 3.5 | 14.2 | 11.8 | 66.6 | 3.9 | Wis. Ex. Sta. Rep., 1886, p. 95 | 1972 |
| 1973 | Do | 12.60 | 2.89 | 12.54 | 10.50 | 56.85 | 4.62 | 3.3 | 14.3 | 12.0 | 65.1 | 5.3 | do | 1973 |
| 1974 | Heavy, locality not given *b* | 11.47 | 3.97 | 10.88 | 68.08 | | 5.60 | 4.5 | 12.2 | 77.0 | | 6.3 | N. J. Ex. Sta. Rep., 1885, p. 172 | 1974 |
| 1975 | Do. *b* | 10.68 | 2.69 | 12.56 | 68.46 | | 5.61 | 3.0 | 14.0 | 76.7 | | 6.3 | do | 1975 |
| 1976 | Do. *b* | 10.72 | 3.56 | 11.19 | 69.63 | | 4.90 | 4.0 | 12.5 | 78.0 | | 5.5 | do | 1976 |
| 1977 | Light, locality not given *b* | 11.17 | 3.81 | 10.69 | 68.36 | | 5.97 | 4.3 | 12.0 | 76.9 | | 6.8 | do | 1977 |
| 1978 | Do. *b* | 11.48 | 2.80 | 12.06 | 68.78 | | 4.88 | 3.2 | 13.7 | 77.6 | | 5.5 | do | 1978 |
| 1979 | Do. *b* | 11.06 | 3.25 | 9.00 | 71.72 | | 4.97 | 3.7 | 10.1 | 80.6 | | 5.6 | do | 1979 |
| 1980 | White, locality not given *b* | 11.52 | 3.54 | 12.88 | 67.48 | | 4.57 | 4.0 | 14.5 | 76.3 | | 5.2 | do | 1980 |
| 1981 | Yellow, locality not given *b* | 11.27 | 3.26 | 11.63 | 68.99 | | 4.85 | 3.7 | 13.0 | 77.8 | | 5.5 | do | 1981 |
| 1982 | Mixed No. 2, locality not given, 34 pounds in a bushel. | 11.59 | 3.15 | 14.25 | 7.78 | 58.12 | 5.12 | 3.6 | 16.1 | 8.8 | 65.7 | 5.8 | Conn. State Ex. Sta. Rep., 1888, p. 151. | 1982 |
| 1983 | White No. 2, locality not given, 32 pounds in a bushel. | 11.28 | 3.59 | 12.43 | 9.77 | 57.69 | 5.24 | 4.1 | 13.9 | 11.1 | 65.0 | 5.9 | do | 1983 |
| 1984 | Variety unknown *a b* | 11.11 | 2.81 | 14.44 | 12.40 | 54.28 | 4.96 | 3.2 | 16.2 | 14.0 | 61.0 | 5.6 | N. Y. State Ex. Sta. Rep., 1888, p. 238. | 1984 |
| 1985 | Do. *a b* | 11.86 | 2.81 | 13.44 | 11.50 | 55.03 | 5.36 | 3.2 | 15.2 | 13.1 | 62.4 | 6.1 | do | 1985 |
| 1986 | Do. *a* | 12.07 | 2.89 | 13.41 | 12.76 | 53.53 | 5.34 | 3.3 | 15.2 | 14.5 | 60.9 | 6.1 | do | 1986 |
| 1987 | Do. *a b* | 11.36 | 3.22 | 11.19 | 12.76 | 55.88 | 5.59 | 3.6 | 13.7 | 14.4 | 62.0 | 6.3 | do | 1987 |
| | All complete analyses of oats. Maximum | 13.48 | 3.59 | 14.44 | 12.89 | 66.89 | 5.77 | 4.1 | 16.2 | 14.7 | 74.9 | 6.5 | | |
| | All complete analyses of oats. Minimum | 8.91 | 2.01 | 8.00 | 1.47 | 53.53 | 3.37 | 2.2 | 9.1 | 1.6 | 60.9 | 3.9 | | |
| | All complete analyses of oats. Average | **10.98** | **2.98** | **11.80** | **9.54** | **59.74** | **4.96** | **3.4** | **13.2** | **10.8** | **67.0** | **5.6** | | |
| | Barley: | | | | | | | | | | | | | |
| 1988 | Nepaul, raised in California † | 8.68 | 1.87 | 12.07 | 1.40 | 73.91 | 2.07 | 2.0 | 13.2 | 1.6 | 81.0 | 2.2 | U. S. Dept. Agr. Rep., 1878, p. 148 | 1988 |
| 1989 | Nepaul (bald), raised in California | 11.20 | 1.82 | 11.64 | 1.28 | 72.37 | 1.69 | 2.1 | 13.1 | 1.4 | 81.5 | 1.9 | U. S. Census, 1880, vol. III, p. 421 | 1989 |
| 1990 | Do | 7.23 | 1.94 | 13.17 | 1.55 | 72.96 | 3.15 | 2.1 | 14.2 | 1.7 | 78.6 | 3.4 | U. S. Dept. Agr. Rep., 1878, p. 148 | 1990 |
| 1991 | Four-rowed, raised in Canada | 12.05 | 2.51 | 10.62 | 3.31 | 69.83 | 1.68 | 2.9 | 12.1 | 3.8 | 79.3 | 1.9 | U. S. Census, 1880, vol. III, p. 421 | 1991 |
| 1992 | Variety unknown, raised in Dakota | 12.57 | 2.43 | 12.57 | 3.66 | 66.97 | 1.80 | 2.8 | 14.4 | 4.2 | 76.5 | 2.1 | do | 1992 |
| 1993 | Two-rowed, raised in Massachusetts | 11.87 | 2.99 | 8.59 | 4.17 | 70.90 | 1.48 | 3.4 | 9.7 | 4.7 | 80.5 | 1.7 | do | 1993 |
| 1994 | Variety unknown, raised in New Hampshire | 10.32 | 2.68 | 12.25 | 4.21 | 68.98 | 1.62 | 3.0 | 13.6 | 4.7 | 76.9 | 1.8 | do | 1994 |
| 1995 | Pueblo (bald), raised in New Mexico | 11.12 | 1.86 | 15.73 | 1.40 | 67.98 | 1.91 | 2.1 | 17.7 | 1.6 | 76.5 | 2.1 | do | 1995 |

* 30 bushels per acre.

† *In loc. cit.*, sugar, gum, and albuminoids soluble and insoluble in alcohol are given.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GRAIN AND OTHER SEEDS—Continued. | | | | | | | | | | | | | |
| | Barley—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 1996 | Four-rowed, raised in New York | 12.43 | 2.81 | 12.75 | 3.15 | 67.29 | 1.57 | 3.2 | 14.6 | 3.6 | 76.8 | 1.8 | U. S. Census, 1880, vol. III, p. 421 | 1996 |
| 1997 | Two-rowed, raised in New York | 11.00 | 3.17 | 14.37 | 3.25 | 66.72 | 1.49 | 3.6 | 16.1 | 3.7 | 74.9 | 1.7 | do | 1997 |
| | All analyses: Maximum | 12.57 | 3.17 | 15.73 | 4.21 | 73.91 | 3.15 | 3.6 | 17.7 | 4.7 | 81.5 | 3.4 | | |
| | All analyses: Minimum | 7.23 | 1.82 | 8.59 | 1.28 | 66.72 | 1.48 | 2.1 | 9.7 | 1.4 | 74.9 | 1.7 | | |
| | All analyses: Average | **10.85** | **2.41** | **12.37** | **2.74** | **69.79** | **1.84** | **2.7** | **13.9** | **3.0** | **78.4** | **2.0** | | |
| | Rye: | | | | | | | | | | | | | |
| 1998 | White Winter | 8.68 | 1.87 | 12.07 | 1.40 | 73.91 | 2.07 | 2.0 | 13.2 | 1.5 | 81.0 | 2.3 | U. S. Dept. Agr. Rep., 1878, p. 148 | 1998 |
| 1999 | Variety unknown | 12.58 | 1.87 | 9.75 | 1.50 | 72.91 | 1.39 | 2.1 | 11.2 | 1.7 | 83.4 | 1.6 | U. S. Census, 1880, vol. III, p. 415 | 1999 |
| 2000 | Spring | 12.72 | 1.94 | 9.50 | 1.90 | 72.33 | 1.61 | 2.2 | 10.9 | 2.2 | 82.9 | 1.8 | do | 2000 |
| 2001 | Variety unknown | 11.71 | 1.87 | 11.69 | 2.06 | 71.21 | 1.46 | 2.1 | 13.2 | 2.3 | 80.7 | 1.7 | do | 2001 |
| 2002 | Black | 13.17 | 1.75 | 10.29 | 1.50 | 71.76 | 1.53 | 2.0 | 11.8 | 1.7 | 82.7 | 1.8 | do | 2002 |
| 2003 | Variety unknown | 10.69 | 1.90 | 10.19 | 1.67 | 73.67 | 1.88 | 2.1 | 11.4 | 1.9 | 82.5 | 2.1 | N. J. Ex. Sta. Rep., 1881, p. 52 | 2003 |
| 2004 | Do. *b* | 9.15 | 1.77 | 9.06 | 78.36 | | 1.66 | 2.0 | 9.9 | 86.2 | | 1.9 | N. J. Ex. Sta. Rep., 1885, p. 170 | 2004 |
| | All complete analyses: Maximum | 13.17 | 1.94 | 12.07 | 2.06 | 73.91 | 2.07 | 2.2 | 13.2 | 2.3 | 83.4 | 2.3 | | |
| | All complete analyses: Minimum | 8.68 | 1.75 | 9.50 | 1.40 | 71.21 | 1.39 | 2.0 | 10.9 | 1.5 | 80.7 | 1.6 | | |
| | All complete analyses: Average | **11.59** | **1.86** | **10.58** | **1.67** | **72.64** | **1.66** | **2.1** | **11.9** | **1.9** | **82.2** | **1.9** | | |
| | Wheat, spring varieties: | | | | | | | | | | | | | |
| 2005 | Improved Fife, raised in Canada* | 8.50 | 1.47 | 14.70 | 1.62 | 71.15 | 2.56 | 1.6 | 16.1 | 1.8 | 77.7 | 2.8 | U. S. Dept. Agr. Rep., 1878, p. 148 | 2005 |
| 2006 | Hedge Row, raised in Colorado | 9.17 | 2.59 | 12.94 | 1.33 | 71.88 | 2.09 | 2.8 | 14.2 | 1.5 | 79.2 | 2.3 | U. S. Dept. Agr. Rep., 1883, p. 206 | 2006 |
| 2007 | Scotch Fife, raised in Dakota | 12.60 | 1.98 | 13.50 | 2.01 | 68.09 | 1.82 | 2.3 | 15.5 | 2.3 | 77.8 | 2.1 | U. S. Census, 1880, vol. III, p. 415 | 2007 |
| 2008 | Do | 12.90 | 1.77 | 13.25 | 1.93 | 68.33 | 1.82 | 2.0 | 15.2 | 2.2 | 78.5 | 2.1 | do | 2008 |
| 2009 | Do | 10.08 | 1.80 | 14.35 | 1.83 | 69.69 | 2.25 | 2.0 | 16.0 | 2.0 | 77.5 | 2.5 | U. S. Dept. Agr. Rep., 1883, p. 204 | 2009 |
| 2010 | Variety unknown, raised in Georgia | 10.92 | 1.80 | 11.20 | 2.13 | 71.55 | 2.40 | 2.0 | 12.6 | 2.4 | 80.3 | 2.7 | U. S. Dept. Agr. Rep., 1883, p. 201 | 2010 |
| 2011 | Amber Bearded, raised in Maine | 13.35 | 1.79 | 11.81 | 1.99 | 69.06 | 2.00 | 2.1 | 13.6 | 2.3 | 79.7 | 2.3 | U. S. Census, 1880, vol. III, p. 415 | 2011 |
| 2012 | Variety unknown, raised in Minnesota | 11.13 | 1.95 | 14.00 | | 72.92 | | 2.2 | 15.8 | | 82.0 | | Mich. Bd. Agr., 1877, p. 350 | 2012 |
| 2013 | Champlain, raised in New York* | 8.79 | 2.05 | 15.40 | 1.49 | 69.72 | 2.55 | 2.2 | 16.9 | 1.6 | 76.5 | 2.8 | U. S. Dept. Agr. Rep., 1878, p. 148 | 2013 |
| 2014 | Defiance, raised in New York* | 8.12 | 1.57 | 14.00 | 2.04 | 71.78 | 2.49 | 1.7 | 15.2 | 2.2 | 78.2 | 2.7 | do | 2014 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2015 | Chili Club, raised in Oregon* | 7.90 | 1.56 | 8.14 | 1.41 | 78.66 | 2.33 | 1.7 | 8.8 | 1.5 | 85.5 | 2.5 | do | 2015 |
| 2016 | Noah Island, raised in Oregon* | 9.64 | 2.00 | 9.80 | 1.92 | 74.58 | 2.06 | 2.2 | 10.8 | 2.1 | 82.6 | 2.3 | do | 2016 |
| 2017 | Clawson, raised in Oregon | 12.99 | 1.77 | 10.50 | | 74.74 | | 2.0 | 12.1 | | 85.9 | | U. S. Dept. Agr. Rep., 1883, p. 198 | 2017 |
| 2018 | Red Chaff, raised in Oregon | 10.68 | 2.20 | 8.40 | 1.65 | 74.91 | 2.16 | 2.5 | 9.4 | 1.8 | 83.9 | 2.4 | U. S. Dept. Agr. Rep., 1883, p. 207 | 2018 |
| 2019 | Red Mammoth, raised in Wisconsin | 12.13 | 2.30 | 15.13 | 2.30 | 66.07 | 2.07 | 2.6 | 17.2 | 2.6 | 75.2 | 2.4 | U. S. Census, vol. III, p. 415 | 2019 |
| | All complete analyses. Maximum | 13.35 | 2.59 | 15.40 | 2.30 | 78.66 | 2.56 | 2.8 | 17.2 | 2.6 | 85.5 | 2.8 | | |
| | All complete analyses. Minimum | 8.12 | 1.47 | 8.14 | 1.33 | 66.07 | 1.82 | 1.6 | 8.8 | 1.5 | 75.2 | 2.1 | | |
| | All complete analyses. Average | **10.35** | **1.91** | **12.51** | **1.82** | **71.21** | **2.20** | **2.1** | **13.9** | **2.0** | **79.5** | **2.5** | | |
| | Wheat, winter varieties: | | | | | | | | | | | | | |
| 2020 | Lancaster Red, raised in Alabama | 11.18 | 2.37 | 12.60 | 1.51 | 70.70 | 1.64 | 2.7 | 14.2 | 1.7 | 79.6 | 1.8 | U. S. Dept. Agr. Rep., 1883, p. 202 | 2020 |
| 2021 | Smooth Mediterranean, raised in Alabama | 10.42 | 2.01 | 11.38 | 1.61 | 72.24 | 2.30 | 2.3 | 12.7 | 1.8 | 80.6 | 2.6 | do | 2021 |
| 2022 | Tuscan Island, raised in Alabama | 10.52 | 2.03 | 10.85 | 1.51 | 72.40 | 2.69 | 2.3 | 12.2 | 1.7 | 80.8 | 3.0 | do | 2022 |
| 2023 | Rogers Red, raised in Alabama | 9.36 | 2.17 | 10.85 | 1.88 | 73.24 | 2.50 | 2.4 | 12.0 | 2.0 | 80.8 | 2.8 | do | 2023 |
| 2024 | Dot, raised in Alabama | 10.21 | 2.18 | 10.85 | 1.54 | 72.85 | 2.37 | 2.5 | 12.1 | 1.7 | 81.0 | 2.7 | do | 2024 |
| 2025 | Clawson, raised in Alabama | 9.81 | 2.09 | 9.98 | 1.81 | 74.37 | 1.94 | 2.3 | 11.1 | 2.0 | 82.5 | 2.1 | do | 2025 |
| 2026 | Rice, raised in Alabama | 10.78 | 2.02 | 11.55 | 1.56 | 71.67 | 2.42 | 2.2 | 12.9 | 1.8 | 80.4 | 2.7 | do | 2026 |
| 2027 | Bill Dallas, raised in Alabama | 11.03 | 1.77 | 10.15 | 1.32 | 73.72 | 2.01 | 2.0 | 11.4 | 1.5 | 82.9 | 2.2 | do | 2027 |
| 2028 | Tennessee Amber, raised in Alabama | 10.84 | 1.96 | 11.03 | 1.53 | 72.57 | 2.07 | 2.2 | 12.3 | 1.7 | 81.5 | 2.3 | do | 2028 |
| 2029 | Emporium, raised in Alabama | 11.62 | 1.91 | 11.90 | 1.60 | 70.93 | 2.04 | 2.1 | 13.4 | 1.8 | 80.4 | 2.3 | do | 2029 |
| 2030 | Lovell New, raised in Alabama | 11.57 | 2.19 | 9.80 | 1.74 | 72.42 | 2.28 | 2.5 | 11.1 | 1.9 | 81.9 | 2.6 | do | 2030 |
| 2031 | Washington Glass, raised in Alabama | 10.84 | 2.12 | 9.80 | 1.80 | 73.02 | 2.42 | 2.5 | 11.0 | 2.0 | 81.8 | 2.7 | do | 2031 |
| 2032 | Eureka, raised in Alabama | 11.43 | 1.96 | 11.38 | 1.65 | 71.49 | 2.09 | 2.3 | 12.8 | 1.8 | 80.7 | 2.4 | do | 2032 |
| 2033 | Purple Straw, raised in Alabama | 12.12 | 1.94 | 12.78 | 1.77 | 68.99 | 2.40 | 2.1 | 14.5 | 2.0 | 78.7 | 2.7 | do | 2033 |
| 2034 | Kilpatrick Rust-Proof, raised in Alabama | 12.36 | 1.88 | 12.25 | 1.49 | 69.89 | 2.13 | 2.2 | 14.0 | 1.7 | 79.7 | 2.4 | do | 2034 |
| 2035 | Hughes Rust-Proof, raised in Alabama | 12.18 | 1.90 | 13.65 | 1.68 | 68.52 | 2.07 | 2.2 | 15.5 | 1.9 | 78.0 | 2.4 | do | 2035 |
| 2036 | Red Mediterranean, raised in Alabama | 9.68 | 2.01 | 12.25 | 1.55 | 72.29 | 2.22 | 2.2 | 13.6 | 1.8 | 80.0 | 2.4 | do | 2036 |
| | Varieties raised in Alabama. Maximum | 12.36 | 2.37 | 13.65 | 1.88 | 74.37 | 2.69 | 2.7 | 15.5 | 2.0 | 82.9 | 3.0 | | |
| | Varieties raised in Alabama. Minimum | 9.36 | 1.77 | 9.80 | 1.32 | 68.52 | 1.64 | 2.0 | 11.0 | 1.5 | 78.0 | 1.8 | | |
| | Varieties raised in Alabama. Average | **10.94** | **2.03** | **11.36** | **1.62** | **71.84** | **2.21** | **2.2** | **12.8** | **1.8** | **80.7** | **2.5** | | |
| 2037 | Soules, raised in British Columbia | 8.51 | 1.63 | 12.25 | | 77.61 | | 1.8 | 13.4 | | 84.8 | | Mich. Bd. Agr. Rep., 1877, p. 350 | 2037 |
| 2038 | Do | 11.22 | 2.09 | 11.88 | | 74.81 | | 2.4 | 13.3 | | 84.3 | | do | 2038 |
| 2039 | Do | 10.07 | 1.89 | 13.45 | | 74.59 | | 2.1 | 15.0 | | 82.9 | | do | 2039 |
| 2040 | Macaroni, raised in California | 10.70 | 1.97 | 13.76 | 1.90 | 70.21 | 1.46 | 2.2 | 15.4 | 2.1 | 78.6 | 1.7 | U. S. Census, 1880, vol. III, p. 415 | 2040 |
| 2041 | Do | 10.93 | 1.45 | 12.84 | 1.75 | 71.40 | 1.63 | 1.6 | 14.4 | 2.0 | 80.2 | 1.8 | do | 2041 |
| 2042 | White Club, raised in California | 11.23 | 1.93 | 8.25 | 2.14 | 74.78 | 1.67 | 2.2 | 9.3 | 2.4 | 84.2 | 1.9 | do | 2042 |
| 2043 | No. 1 San Francisco Produce Exchange, raised in California. | 11.03 | 1.76 | 9.69 | 2.15 | 73.58 | 1.77 | 2.0 | 10.9 | 2.4 | 82.7 | 2.0 | do | 2043 |
| | Average, varieties raised in California. | **10.97** | **1.78** | **11.14** | **1.98** | **72.49** | **1.64** | **2.0** | **12.5** | **2.2** | **81.5** | **1.8** | | |

*In *loc. cit.*, sugar, gum, and albuminoids soluble and insoluble in alcohol are given.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | Referenees to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GRAIN AND OTHER SEEDS—Continued. | | | | | | | | | | | | | |
| | Wheat, winter varieties—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 2044 | Victor, raised in Canada* | 7.49 | 1.39 | 9.45 | 1.69 | 77.71 | 2.27 | 1.5 | 10.2 | 1.8 | 84.0 | 2.5 | U. S. Dept. Agr. Rep., 1878, p. 147 | 2044 |
| 2045 | Silver Chaff, raised in Canada* | 8.93 | 1.58 | 9.89 | 1.75 | 75.41 | 2.44 | 1.7 | 10.9 | 1.9 | 82.8 | 2.7 | do | 2045 |
| 2046 | Do | 11.05 | 1.90 | 9.80 | 1.70 | 73.27 | 2.28 | 2.1 | 11.0 | 1.9 | 82.4 | 2.6 | U. S. Dept. Agr. Rep., 1883, p. 200 | 2046 |
| 2047 | Midge-Proof, raised in Canada | 11.60 | 1.45 | 9.80 | 1.68 | 73.43 | 2.04 | 1.7 | 11.1 | 1.9 | 82.9 | 2.4 | do | 2047 |
| 2048 | Arnold Victor, raised in Canada | 10.90 | 1.60 | 11.55 | 1.58 | 72.23 | 2.14 | 1.8 | 13.0 | 1.8 | 81.0 | 2.4 | do | 2048 |
| | Average, varieties raised in Canada | **9.99** | **1.58** | **10.10** | **1.68** | **74.42** | **2.23** | **1.8** | **11.2** | **1.9** | **82.7** | **2.4** | | |
| 2049 | Hybrid No. 10, raised in Colorado | 9.72 | 2.28 | 13.75 | 1.32 | 70.77 | 2.16 | 2.5 | 15.2 | 1.4 | 78.6 | 2.3 | U. S. Dept. Agr. Rep., 1883, p. 205 | 2049 |
| 2050 | Hybrid No. 15, raised in Colorado | 10.07 | 1.93 | 12.25 | 1.57 | 71.50 | 2.68 | 2.1 | 13.7 | 1.8 | 79.4 | 3.0 | do | 2050 |
| 2051 | Hybrid No. 16, raised in Colorado | 9.53 | 2.04 | 11.75 | 1.62 | 72.52 | 2.54 | 2.2 | 13.0 | 1.8 | 80.2 | 2.8 | do | 2051 |
| 2052 | Hybrid No. 17, raised in Colorado | 9.93 | 2.07 | 13.62 | 1.59 | 62.86 | 3.93 | 2.3 | 15.0 | 1.8 | 76.6 | 4.3 | do | 2052 |
| 2053 | Hybrid No. 18, raised in Colorado | 9.74 | 2.19 | 12.94 | 1.60 | 71.95 | 1.58 | 2.4 | 14.3 | 1.8 | 79.7 | 1.8 | do | 2053 |
| 2054 | Hybrid No. 19, raised in Colorado | 10.45 | 2.54 | 12.44 | 1.79 | 70.59 | 2.19 | 2.8 | 13.9 | 2.0 | 78.8 | 2.5 | U. S. Dept. Agr. Rep., 1883, p. 206 | 2054 |
| 2055 | Hybrid No. 20, raised in Colorado | 10.57 | 3.57 | 12.25 | 1.67 | 69.62 | 2.32 | 4.0 | 13.7 | 1.9 | 77.8 | 2.6 | do | 2055 |
| 2056 | New South Wales seed, raised in Colorado | 9.47 | 2.18 | 12.62 | 1.55 | 71.78 | 2.40 | 2.4 | 13.9 | 1.7 | 79.3 | 2.7 | do | 2056 |
| 2057 | Centennial, raised in Colorado | 9.66 | 2.35 | 12.06 | 1.10 | 72.83 | 2.00 | 2.7 | 13.4 | 1.2 | 80.5 | 2.2 | do | 2057 |
| 5058 | El Dorado, raised in Colorado | 10.55 | 2.24 | 11.73 | 1.10 | 71.93 | 2.43 | 2.5 | 13.0 | 1.2 | 80.6 | 2.7 | do | 2058 |
| 2059 | White Mexican, raised in Colorado | 9.91 | 2.60 | 13.81 | 1.52 | 70.27 | 1.89 | 2.9 | 15.3 | 1.7 | 78.0 | 2.1 | do | 2059 |
| 2060 | Judkin, raised in Colorado | 9.75 | 2.57 | 12.25 | 1.70 | 71.31 | 2.42 | 2.9 | 13.6 | 1.9 | 78.9 | 2.7 | do | 2060 |
| 2061 | Australian, raised in Colorado | 9.78 | 1.85 | 11.19 | 1.45 | 73.50 | 2.23 | 2.1 | 12.4 | 1.7 | 81.4 | 2.4 | do | 2061 |
| 2062 | Fountain, raised in Colorado | 10.58 | 2.70 | 13.62 | 1.32 | 69.63 | 2.15 | 3.0 | 15.2 | 1.5 | 77.9 | 2.4 | do | 2062 |
| 2063 | Perfection, raised in Colorado | 9.93 | 1.99 | 14.18 | 1.55 | 70.03 | 2.32 | 2.2 | 15.7 | 1.7 | 77.8 | 2.6 | do | 2063 |
| 2064 | Russian, raised in Colorado | 9.55 | 1.99 | 14.49 | 1.49 | 69.86 | 2.62 | 2.2 | 16.0 | 1.6 | 77.3 | 2.9 | do | 2064 |
| 2065 | Rio Grande, raised in Colorado | 9.51 | 2.08 | 14.69 | 1.79 | 68.97 | 2.96 | 2.3 | 16.2 | 2.0 | 76.2 | 3.3 | do | 2065 |
| 2066 | Touselle, raised in Colorado | 10.23 | 2.10 | 13.50 | 1.65 | 70.17 | 2.35 | 2.3 | 15.0 | 1.9 | 78.1 | 2.7 | do | 2066 |
| 2067 | German Fife, raised in Colorado | 10.42 | 2.31 | 15.06 | 1.48 | 67.94 | 2.79 | 2.6 | 16.9 | 1.7 | 75.7 | 3.1 | do | 2067 |
| 2068 | Oregon Club, raised in Colorado | 9.59 | 1.91 | 12.25 | 1.60 | 72.46 | 2.19 | 2.1 | 13.6 | 1.8 | 80.1 | 2.4 | do | 2068 |
| 2069 | Sonoro, raised in Colorado | 10.17 | 2.02 | 14.18 | 1.40 | 70.10 | 2.13 | 2.2 | 15.8 | 1.6 | 78.0 | 2.4 | do | 2069 |
| 2070 | Imperial Fife, raised in Colorado | 9.48 | 2.64 | 15.94 | 1.63 | 68.00 | 2.31 | 2.9 | 17.7 | 1.8 | 75.1 | 2.5 | do | 2070 |
| 2071 | Lost Nation, raised in Colorado | 10.24 | 2.17 | 12.93 | 1.74 | 69.93 | 2.99 | 2.4 | 14.4 | 1.9 | 78.0 | 3.3 | do | 2071 |
| 2072 | Pringle No. 6, raised in Colorado | 9.89 | 2.13 | 13.13 | 1.70 | 70.63 | 2.52 | 2.3 | 14.5 | 1.9 | 78.5 | 2.8 | do | 2072 |
| 2073 | Pringle No. 7, raised in Colorado | 9.89 | 2.23 | 15.25 | 1.78 | 68.65 | 2.20 | 2.4 | 16.9 | 2.0 | 76.2 | 2.5 | do | 2073 |
| 2074 | Clawson, raised in Colorado | 10.14 | 1.94 | 11.75 | 1.60 | 72.26 | 2.31 | 2.1 | 13.0 | 1.8 | 80.5 | 2.6 | do | 2074 |
| 2075 | Hedge Row, raised in Colorado | 9.07 | 2.08 | 13.62 | 1.62 | 71.50 | 2.11 | 2.3 | 14.9 | 1.8 | 78.7 | 2.3 | do | 2075 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2076 | White Chaff, raised in Colorado | 9.57 | 2.13 | 14.04 | 2.18 | 69.64 | 2.44 | 2.3 | 15.5 | 2.4 | 77.1 | 2.7 | do | 2076 |
| 2077 | Triticum, raised in Colorado | 10.02 | 2.67 | 13.62 | 1.51 | 69.52 | 2.65 | 3.0 | 15.0 | 1.7 | 77.3 | 3.0 | do | 2077 |
| 2078 | Durun Russia, raised in Colorado | 9.91 | 2.32 | 15.25 | 1.54 | 68.98 | 2.00 | 2.6 | 17.0 | 1.7 | 76.5 | 2.2 | do | 2078 |
| 2079 | Doty, raised in Colorado | 9.41 | 2.35 | 14.00 | 1.80 | 69.94 | 2.50 | 2.6 | 15.5 | 2.0 | 77.1 | 2.8 | do | 2079 |
| 2080 | Meekins, raised in Colorado | 9.38 | 2.53 | 15.15 | 1.59 | 68.38 | 2.97 | 2.8 | 16.7 | 1.7 | 75.5 | 3.3 | do | 2080 |
| 2081 | McGhee Red, raised in Colorado | 7.85 | 1.85 | 14.00 | 1.80 | 72.53 | 1.97 | 2.0 | 15.2 | 2.0 | 78.7 | 2.1 | do | 2081 |
| 2082 | Finlay, raised in Colorado | 9.30 | 1.85 | 12.60 | 1.73 | 72.16 | 2.36 | 2.0 | 13.9 | 1.9 | 79.6 | 2.6 | do | 2082 |
| 2083 | Champion Amber, raised in Colorado | 8.20 | 2.20 | 11.90 | 1.55 | 73.68 | 2.47 | 2.4 | 13.0 | 1.7 | 80.2 | 2.7 | do | 2083 |
| 2084 | Dallas, raised in Colorado | 10.05 | 1.85 | 14.53 | 1.73 | 69.38 | 2.46 | 2.1 | 16.2 | 1.9 | 77.1 | 2.7 | do | 2084 |
| 2085 | Bennett, raised in Colorado | 7.85 | 2.20 | 13.65 | 2.05 | 71.67 | 2.58 | 2.4 | 14.8 | 2.2 | 77.8 | 2.8 | do | 2085 |
| 2086 | Lemon, raised in Colorado | 8.45 | 2.05 | 12.43 | 1.68 | 72.25 | 2.14 | 2.2 | 13.6 | 1.8 | 80.1 | 2.3 | do | 2086 |
| 2087 | Gold Medal, raised in Colorado | 9.25 | 1.80 | 12.25 | 1.73 | 72.71 | 2.26 | 2.0 | 13.5 | 1.9 | 80.1 | 2.5 | do | 2087 |
| 2088 | German Amber, raised in Colorado | 8.80 | 1.80 | 12.43 | 1.75 | 72.80 | 2.42 | 2.0 | 13.6 | 1.9 | 79.8 | 2.7 | do | 2088 |
| 2089 | Rice, raised in Colorado | 8.50 | 2.10 | 14.18 | 1.97 | 70.86 | 2.39 | 2.3 | 15.5 | 2.2 | 77.4 | 2.6 | do | 2089 |
| 2090 | Washington Glass, raised in Colorado | 8.60 | 1.95 | 11.55 | 1.18 | 74.31 | 2.41 | 2.1 | 12.6 | 1.3 | 81.3 | 2.7 | do | 2090 |
| 2091 | Swamp, raised in Colorado | 10.15 | 2.05 | 14.35 | 1.85 | 69.31 | 2.29 | 2.3 | 16.0 | 2.1 | 77.1 | 2.5 | U. S. Dept. Agr. Rep., 1883, p. 207 | 2091 |
| 2092 | Wysor, raised in Colorado | 8.55 | 2.25 | 12.60 | 2.13 | 72.27 | 2.20 | 2.5 | 13.8 | 2.3 | 79.0 | 2.4 | do | 2092 |
| | Varieties raised in Colorado. Maximum | 10.57 | 3.57 | 15.94 | 2.18 | 74.31 | 3.93 | 4.0 | 17.7 | 2.4 | 81.4 | 4.3 | | |
| | Varieties raised in Colorado. Minimum | 7.85 | 1.80 | 11.19 | 1.10 | 62.86 | 1.58 | 2.0 | 12.4 | 1.3 | 75.1 | 1.8 | | |
| | Varieties raised in Colorado. Average | **9.58** | **2.20** | **13.31** | **1.63** | **70.89** | **2.39** | **2.4** | **14.7** | **1.9** | **78.3** | **2.7** | | |
| 2093 | Castle Fife, raised in Dakota | 10.98 | 2.20 | 10.68 | 1.83 | 72.20 | 2.11 | 2.5 | 12.6 | 2.0 | 81.1 | 2.4 | U. S. Dept. Agr. Rep., 1883, p. 204 | 2093 |
| 2094 | Dallas, raised in Georgia | 7.95 | 2.15 | 12.60 | 1.65 | 73.17 | 2.48 | 2.3 | 13.7 | 1.8 | 79.5 | 2.7 | U. S. Dept. Agr. Rep., 1883, p. 201 | 2094 |
| 2095 | Bennett, raised in Georgia | 8.05 | 2.05 | 14.00 | 1.38 | 72.30 | 2.22 | 2.2 | 15 2 | 1.5 | 78.7 | 2.4 | do | 2095 |
| 2096 | Italian White, raised in Georgia | 11.22 | 1.70 | 9.45 | 1.48 | 73.47 | 2.68 | 1.9 | 10.6 | 1.7 | 82.8 | 3.0 | do | 2096 |
| 2097 | Purple Straw, raised in Georgia | 10.49 | 2.30 | 10.15 | 1.48 | 73.46 | 2.12 | 2.6 | 11.3 | 1.6 | 82.1 | 2.4 | do | 2097 |
| 2098 | Red Mediterranean, raised in Georgia | 9.19 | 2.04 | 12.43 | 2.03 | 72.18 | 2.13 | 2.2 | 13.7 | 2.2 | 79.5 | 2.4 | do | 2098 |
| 2099 | Do | 12.20 | 1.66 | 12.60 | 1.88 | 69.57 | 2.09 | 1.9 | 14.5 | 2.1 | 79.1 | 2.4 | do | 2099 |
| 2100 | Do | 9.83 | 1.70 | 10.85 | 1.68 | 73.73 | 2.21 | 1.9 | 12.1 | 1.9 | 81.7 | 2.4 | U. S. Dept. Agr. Bul. 1, 1883, p. 19 | 2100 |
| 2101 | Do | 9.88 | 1.62 | 10.85 | 1.79 | 73.80 | 2.06 | 1.8 | 12.1 | 2.0 | 81.9 | 2.2 | do | 2101 |
| | Varieties raised in Georgia. Maximum | 12.20 | 2.30 | 14.00 | 2.03 | 73.80 | 2.68 | 2.6 | 15.2 | 2.2 | 82.8 | 3.0 | | |
| | Varieties raised in Georgia. Minimum | 7.95 | 1.62 | 9.45 | 1.38 | 69.57 | 2.06 | 1.8 | 10.6 | 1.5 | 78.7 | 2.2 | | |
| | Varieties raised in Georgia. Average | **9.85** | **1.90** | **11.62** | **1.67** | **72.71** | **2.25** | **2.1** | **12.8** | **1.9** | **80.7** | **2.5** | | |
| 2102 | Osterey, raised in Indiana | 10.16 | 2.05 | 10.85 | 2.02 | 73.41 | 1.51 | 2.3 | 12.1 | 2.2 | 81.8 | 1.6 | U. S. Dept. Agr. Rep., 1883, p. 202 | 2102 |
| 2103 | Fultz, raised in Kentucky | 10.55 | 1.40 | 11.90 | 1.98 | 71.87 | 2.30 | 1.6 | 13.3 | 2.2 | 80.3 | 2.6 | U. S. Dept. Agr. Rep., 1883, p. 204 | 2103 |
| 2104 | Rice, raised in Kentucky | 10.53 | 1.79 | 14.53 | 1.61 | 69.55 | 1.99 | 2.0 | 16.2 | 1.8 | 77.8 | 2.2 | do | 2104 |
| 2105 | Do | 10.96 | 1.52 | 14.00 | 1.69 | 69.89 | 1.94 | 1.8 | 15.7 | 1.9 | 78.4 | 2.2 | do | 2105 |
| 2106 | Fultz, raised in Kentucky | 12.44 | 1.76 | 12.78 | 1.71 | 69.44 | 1.87 | 2.0 | 14.6 | 1.9 | 79.4 | 2.1 | do | 2106 |
| 2107 | Odessa, raised in Kentucky | 10.68 | 1.76 | 11.90 | 2.27 | 71.75 | 1.64 | 2.0 | 13.3 | 2.5 | 80.4 | 1.8 | do | 2107 |
| 2108 | German Amber, raised in Kentucky | 9.86 | 1.78 | 14.18 | 2.44 | 69.95 | 1.79 | 2.0 | 15.7 | 2.8 | 77.5 | 2.0 | do | 2108 |

*In *loc. cit.*, sugar, gum, and albuminoids soluble and insoluble in alcohol are given.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GRAIN AND OTHER SEEDS—Continued. | | | | | | | | | | | | | |
| | Wheat, winter varieties—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 2109 | White, raised in Kentucky | 9.94 | 2.07 | 12.78 | 2.34 | 71.22 | 1.65 | 2.3 | 14.2 | 2.6 | 79.1 | 1.8 | U. S. Dept. Agr. Rep., 1883, p. 204 | 2109 |
| 2110 | Fultz, raised in Kentucky | 11.68 | 1.88 | 13.13 | 2.25 | 69.26 | 1.80 | 2.1 | 14.9 | 2.5 | 78.4 | 2.1 | do | 2110 |
| | Varieties raised in Kentucky. Maximum | 12.44 | 2.07 | 14.53 | 2.44 | 71.87 | 2.30 | 2.3 | 16.2 | 2.8 | 80.4 | 2.6 | | |
| | Varieties raised in Kentucky. Minimum | 9.86 | 1.40 | 11.90 | 1.61 | 69.26 | 1.64 | 1.6 | 13.3 | 1.8 | 77.5 | 1.8 | | |
| | Varieties raised in Kentucky. Average | **10.83** | **1.75** | **3.15** | **2.03** | **70.37** | **1.87** | **1.9** | **14.6** | **2.2** | **79.2** | **2.1** | | |
| 2111 | Polish, raised in Maryland | 10.08 | 1.67 | 12.43 | 1.56 | 71.59 | 2.67 | 1.8 | 13.8 | 1.8 | 79.6 | 3.0 | U. S. Dept. Agr. Rep., 1878, p. 147 | 2111 |
| 2112 | Rice, raised in Maryland* | 8.40 | 2.15 | 14.53 | 1.63 | 70.97 | 2.32 | 2.4 | 15.9 | 1.7 | 77.5 | 2.5 | U. S. Dept. Agr. Rep., 1883, p. 201 | 2112 |
| 2113 | Fultz, raised in Maryland | 11.06 | 1.85 | 9.98 | 1.70 | 73.43 | 1.98 | 2.1 | 11.3 | 1.9 | 82.4 | 2.3 | do | 2113 |
| 2114 | Rice, raised in Maryland | 10.00 | 1.80 | 12.25 | 1.86 | 71.91 | 2.18 | 2.0 | 13.6 | 2.1 | 79.9 | 2.4 | do | 2114 |
| 2115 | Centennial Amber, raised in Maryland | 11.05 | 2.05 | 12.08 | 1.68 | 71.03 | 2.11 | 2.3 | 13.6 | 1.9 | 79.8 | 2.4 | do | 2115 |
| 2116 | Midge-Proof, raised in Maryland | 9.45 | 1.35 | 10.85 | 1.63 | 74.79 | 1.93 | 1.5 | 12.0 | 1.8 | 82.6 | 2.1 | do | 2116 |
| 2117 | Fultz, raised in Maryland | 11.34 | 1.66 | 9.80 | 1.72 | 73.21 | 2.27 | 1.9 | 11.0 | 1.9 | 82.6 | 2.6 | do | 2117 |
| 2118 | Do | 11.38 | 1.64 | 10.85 | 1.59 | 72.99 | 1.55 | 1.8 | 12.3 | 1.8 | 82.3 | 1.8 | do | 2118 |
| 2119 | White Mediterranean, raised in Maryland | 11.92 | 1.63 | 12.08 | 2.30 | 70.30 | 1.77 | 1.8 | 13.7 | 2.6 | 80.0 | 1.9 | do | 2119 |
| | Varieties raised in Maryland. Maximum | 11.92 | 2.15 | 14.53 | 2.30 | 74.79 | 2.67 | 2.4 | 15.9 | 2.6 | 82.6 | 3.0 | | |
| | Varieties raised in Maryland. Minimum | 8.40 | 1.35 | 9.80 | 1.56 | 70.30 | 1.55 | 1.5 | 11.0 | 1.7 | 79.6 | 1.8 | | |
| | Varieties raised in Maryland. Average | **10.52** | **1.76** | **11.65** | **1.74** | **72.25** | **2.08** | **2.0** | **13.0** | **1.9** | **80.8** | **2.3** | | |
| 2120 | Michigan White, cleaned for grinding, raised in Michigan. | 12.75 | 1.56 | 11.64 | 1.83 | 70.96 | 1.26 | 1.8 | 13.3 | 2.1 | 81.4 | 1.4 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 25. | 2120 |
| 2121 | Diehl, raised in Michigan | 9.64 | 1.72 | 12.38 | | 76.26 | | 1.9 | 13.7 | | 84.4 | | Mich. Bd. Agr. Rep., 1877, p. 350 | 2121 |
| 2122 | Do | 12.18 | 1.82 | 13.78 | | 72.22 | | 2.1 | 15.6 | | 82.3 | | do | 2122 |
| 2123 | Do | 12.68 | 1.77 | 11.81 | | 73.74 | | 2.0 | 13.5 | | 84.5 | | do | 2123 |
| 2124 | Do | 10.25 | 1.50 | 11.88 | | 76.37 | | 1.7 | 13.2 | | 85.1 | | do | 2124 |
| 2125 | Soules, raised in Michigan | 11.02 | 1.73 | 11.81 | | 75.44 | | 1.9 | 12.8 | | 84.8 | | do | 2125 |
| 2126 | Lincoln, raised in Michigan | 13.38 | 1.56 | 11.90 | | 73.16 | | 1.8 | 13.8 | | 84.4 | | do | 2126 |
| 2127 | Do | 10.78 | 1.75 | 11.38 | | 76.09 | | 2.0 | 12.7 | | 85.3 | | do | 2127 |
| 2128 | Fultz, raised in Michigan | 11.45 | 1.74 | 11.59 | | 75.22 | | 2.0 | 13.1 | | 84.9 | | do | 2128 |
| 2129 | Do | 12.53 | 1.74 | 14.47 | | 71.26 | | 2.0 | 16.5 | | 81.5 | | do | 2129 |
| 2130 | Treadwell, raised in Michigan | 12.69 | 1.71 | 12.50 | | 73.10 | | 2.0 | 14.3 | | 83.7 | | do | 2130 |
| 2131 | Do | 9.94 | 1.80 | 11.69 | | 76.57 | | 2.0 | 13.0 | | 85.0 | | do | 2131 |
| 2132 | Do | 10.00 | 1.76 | 11.88 | | 76.36 | | 2.0 | 13.2 | | 84.8 | | do | 2132 |
| 2133 | Tappahannock, raised in Michigan | 11.21 | 1.77 | 13.56 | | 73.46 | | 2.0 | 15.3 | | 82.7 | | do | 2133 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2134 | Lancaster, raised in Michigan | 11.93 | 1.82 | 14.00 | | 72.25 | | 2.1 | 15.9 | | 82.0 | | do | 2134 |
| 2135 | Asiatic, raised in Michigan | 11.11 | 1.70 | 12.25 | | 74.94 | | 1.9 | 13.8 | | 84.3 | | do | 2135 |
| 2136 | Gold Medal, raised in Michigan | 10.55 | 1.73 | 11.15 | | 76.57 | | 1.9 | 12.5 | | 85.6 | | do | 2136 |
| 2137 | Do | 10.12 | 2.00 | 13.06 | | 74.82 | | 2.2 | 14.5 | | 83.2 | | do | 2137 |
| 2138 | Egyptian Red, raised in Michigan | 11.48 | 1.69 | 11.19 | | 75.64 | | 1.9 | 12.6 | | 85.5 | | do | 2138 |
| 2139 | Clawson, raised in Michigan | 12.29 | 1.64 | 11.88 | | 74.19 | | 1.9 | 13.5 | | 84.6 | | do | 2139 |
| 2140 | Do | 11.30 | 1.74 | 10.94 | | 76.02 | | 2.0 | 12.3 | | 85.7 | | do | 2140 |
| 2141 | Do | 12.29 | 1.79 | 11.16 | | 74.76 | | 2.1 | 12.7 | | 85.2 | | do | 2141 |
| 2142 | Do | 10.36 | 1.64 | 11.81 | | 76.19 | | 1.8 | 13.2 | | 85.0 | | do | 2142 |
| 2143 | Do | 11.19 | 1.76 | 12.06 | | 74.99 | | 2.0 | 13.6 | | 84.4 | | do | 2143 |
| 2144 | Do | 11.09 | 1.64 | 12.38 | | 74.89 | | 1.9 | 13.9 | | 84.2 | | do | 2144 |
| 2145 | Do | 11.08 | 1.49 | 12.25 | | 75.18 | | 1.7 | 13.8 | | 84.5 | | do | 2145 |
| 2146 | Do | 10.43 | 1.70 | 12.69 | | 75.18 | | 1.9 | 14.2 | | 83.9 | | do | 2146 |
| 2147 | Do | 10.31 | 1.60 | 12.25 | | 75.84 | | 1.8 | 13.7 | | 84.6 | | do | 2147 |
| 2148 | Do | 13.00 | 1.79 | 11.37 | | 73.84 | | 2.1 | 13.1 | | 84.8 | | do | 2148 |
| 2149 | Weeks, raised in Michigan | 10.03 | 1.59 | 11.00 | | 77.38 | | 2.0 | 12.1 | | 85.9 | | do | 2149 |
| 2150 | Powers, raised in Michigan | 10.85 | 1.70 | 12.03 | | 75.42 | | 1.9 | 13.5 | | 84.6 | | do | 2150 |
| 2151 | Armstrong, raised in Michigan | 12.21 | 1.97 | 12.88 | | 72.94 | | 2.2 | 14.7 | | 83.1 | | do | 2151 |
| 2152 | Tuscan, raised in Michigan | 13.77 | 1.72 | 11.37 | | 73.14 | | 2.0 | 13.2 | | 84.8 | | do | 2152 |
| 2153 | Post, raised in Michigan | 10.27 | 1.58 | 11.25 | | 76.90 | | 1.8 | 12.5 | | 85.7 | | do | 2153 |
| 2154 | No. 1 White, raised in Michigan | 12.89 | 1.85 | 11.06 | 1.90 | 70.74 | 1.56 | 2.1 | 12.7 | 2.2 | 81.2 | 1.8 | U. S. Census, vol. III, p. 414 | 2154 |
| 2155 | Buckeye, raised in Michigan | 12.73 | 1.38 | 10.97 | | 74.92 | | 1.6 | 12.6 | | 85.8 | | U. S. Dept. Agr. Rep., 1883, p. 198 | 2155 |
| 2156 | White Extra, raised in Michigan | 9.64 | 1.72 | 12.38 | | 76.26 | | 1.9 | 13.7 | | 84.4 | | U. S. Dept. Agr. Rep., 1883, p. 202 | 2156 |
| 2157 | Silver Chaff, raised in Michigan | 10.25 | 1.00 | 10.85 | 1.20 | 75.00 | 1.70 | 1.1 | 12.3 | 1.3 | 83.4 | 1.9 | do | 2157 |
| 2158 | Louisiana, raised in Michigan | 10.30 | 1.60 | 10.50 | 1.80 | 73.73 | 2.07 | 1.8 | 11.7 | 2.0 | 82.2 | 2.3 | U. S. Dept. Agr. Rep., 1883, p. 203 | 2158 |
| 2159 | Jersey Red, raised in Michigan | 9.05 | 1.70 | 11.73 | 2.18 | 73.17 | 2.17 | 1.9 | 12.8 | 2.4 | 80.5 | 2.4 | do | 2159 |
| 2160 | Powers, raised in Michigan | 9.70 | 1.05 | 10.50 | 1.05 | 75.91 | 1.79 | 1.2 | 11.6 | 1.2 | 84.0 | 2.0 | do | 2160 |
| 2161 | Dot, raised in Michigan | 9.70 | 1.90 | 12.43 | 1.80 | 71.94 | 2.23 | 2.1 | 13.7 | 2.0 | 79.8 | 2.4 | do | 2161 |
| 2162 | Michigan Wick, raised in Michigan | 9.65 | 1.65 | 10.68 | 2.05 | 73.88 | 2.09 | 1.9 | 11.8 | 2.3 | 81.7 | 2.3 | do | 2162 |
| 2163 | Schaefer, raised in Michigan | 9.35 | 1.65 | 11.20 | 1.88 | 73.80 | 2.12 | 1.9 | 12.3 | 2.1 | 81.4 | 2.3 | do | 2163 |
| 2164 | Lancaster Red, raised in Michigan | 11.25 | 1.80 | 12.95 | 1.83 | 69.96 | 2.21 | 2.0 | 14.7 | 2.0 | 78.8 | 2.5 | do | 2164 |
| 2165 | Velvet Chaff, raised in Michigan | 11.50 | 2.05 | 14.00 | 1.68 | 68.60 | 2.17 | 2.4 | 15.8 | 1.9 | 77.4 | 2.5 | do | 2165 |
| 2166 | Shumaker, raised in Michigan | 11.10 | 1.35 | 12.60 | 1.60 | 71.38 | 1.97 | 1.6 | 14.1 | 1.8 | 80.3 | 2.2 | do | 2166 |
| 2167 | Armstrong, raised in Michigan | 10.60 | 1.70 | 10.68 | 2.10 | 72.62 | 2.30 | 1.9 | 11.9 | 2.3 | 81.4 | 2.5 | do | 2167 |
| 2168 | Muskingum, raised in Michigan | 11.34 | 1.40 | 12.60 | 1.90 | 70.59 | 2.16 | 1.6 | 14.1 | 2.2 | 79.6 | 2.5 | do | 2168 |
| 2169 | Mediterranean, raised in Michigan | 10.90 | 1.25 | 15.23 | 1.23 | 69.41 | 1.98 | 1.4 | 17.1 | 1.4 | 77.9 | 2.2 | do | 2169 |
| 2170 | Red Russian, raised in Michigan | 10.40 | 2.05 | 12.08 | 1.78 | 71.38 | 2.31 | 2.3 | 13.5 | 2.0 | 79.6 | 2.6 | do | 2170 |
| 2171 | Diehl, raised in Michigan | 10.90 | 1.75 | 10.50 | 1.60 | 73.11 | 2.14 | 2.0 | 11.7 | 1.8 | 82.1 | 2.4 | do | 2171 |
| 2172 | Clawson, raised in Michigan | 11.40 | 1.65 | 10.68 | 1.95 | 72.12 | 2.20 | 1.9 | 12.0 | 2.3 | 81.3 | 2.5 | do | 2172 |
| 2173 | Jennings, raised in Michigan | 11.65 | 1.85 | 12.25 | 1.65 | 70.61 | 1.99 | 2.1 | 13.9 | 1.9 | 79.8 | 2.3 | do | 2173 |
| 2174 | Buckeye, raised in Michigan | 11.55 | 1.45 | 12.43 | 1.95 | 70.73 | 1.89 | 1.7 | 14.0 | 2.2 | 80.0 | 2.1 | do | 2174 |
| 2175 | Trump, raised in Michigan | 10.95 | 1.70 | 11.38 | 2.00 | 72.02 | 1.95 | 1.9 | 12.7 | 2.2 | 81.0 | 2.2 | do | 2175 |
| 2176 | Shumaker, raised in Michigan | 10.05 | 2.08 | 9.13 | 2.28 | 74.01 | 2.45 | 2.3 | 10.2 | 2.6 | 82.2 | 2.7 | do | 2176 |
| 2177 | Clawson, raised in Michigan | 11.22 | 1.97 | 10.69 | 2.35 | 71.59 | 2.18 | 2.3 | 12.0 | 2.6 | 80.6 | 2.5 | do | 2177 |
| | All complete analyses, varieties raised in Michigan. Maximum | 13.77 | 2.08 | 15.23 | 2.35 | 75.91 | 2.45 | 2.4 | 17.1 | 2.6 | 84.0 | 2.7 | | |
| | Minimum | 9.05 | 1.00 | 9.13 | 1.05 | 70.59 | 1.26 | 1.1 | 10.2 | 1.2 | 77.4 | 1.9 | | |
| | Average | **10.80** | **1.66** | **11.64** | **1.81** | **72.06** | **2.03** | **1.9** | **13.0** | **2.0** | **80.9** | **2.2** | | |

* *In loc. cit.*, sugar, gum, and albuminoids soluble and insoluble in alcohol are given.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **GRAIN AND OTHER SEEDS—Continued.** | | | | | | | | | | | | | |
| | Wheat, winter varieties—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 2178 | Missouri Red Fall, St. Louis inspection, clean for grinding, raised in Missouri. | 13.52 | 1.55 | 11.79 | 1.72 | 69.95 | 1.47 | 1.8 | 13.6 | 2.0 | 80.9 | 1.7 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 25. | 2178 |
| 2179 | Yellow, raised in Missouri * | 7.69 | 1.91 | 11.59 | 1.53 | 75.17 | 2.11 | 2.1 | 12.6 | 1.7 | 81.3 | 2.3 | U. S. Dept. Agr. Rep., 1878, p. 147 | 2179 |
| 2180 | Fultz, raised in Missouri | 10.28 | 1.80 | 10.50 | 2.28 | 72.86 | 2.28 | 2.0 | 11.7 | 2.5 | 81.3 | 2.5 | U. S. Dept. Agr. Rep., 1883, p. 205 | 2180 |
| 2181 | Shumaker, raised in Missouri | 8.64 | 1.99 | 12.44 | 2.49 | 72.11 | 2.33 | 2.2 | 13.6 | 2.7 | 78.9 | 2.6 | do | 2181 |
| 2182 | Zimmerman, raised in Missouri | 9.18 | 2.01 | 11.38 | 2.57 | 72.51 | 2.35 | 2.2 | 12.5 | 2.8 | 79.9 | 2.6 | do | 2182 |
| 2183 | Clawson, raised in Missouri | 9.18 | 1.91 | 11.19 | 2.28 | 73.28 | 2.16 | 2.1 | 12.3 | 2.5 | 80.7 | 2.4 | do | 2183 |
| 2184 | Russian No. 2, raised in Missouri | 8.43 | 2.09 | 11.00 | 2.72 | 73.53 | 2.23 | 2.3 | 12.0 | 3.0 | 80.3 | 2.4 | do | 2184 |
| 2185 | Smooth Mediterranean, raised in Missouri | 9.45 | 1.89 | 11.75 | 2.68 | 72.43 | 1.80 | 2.1 | 13.0 | 3.0 | 79.9 | 2.0 | do | 2185 |
| 2186 | Silver Chaff, raised in Missouri | 10.99 | 2.22 | 11.19 | 2.29 | 70.89 | 2.42 | 2.5 | 12.6 | 2.6 | 79.6 | 2.7 | do | 2186 |
| 2187 | Octerey, raised in Missouri | 11.48 | 1.90 | 11.43 | 1.88 | 70.95 | 2.36 | 2.2 | 12.9 | 2.1 | 80.1 | 2.7 | do | 2187 |
| 2188 | Rice, raised in Missouri | 9.36 | 1.88 | 14.00 | 1.77 | 70.62 | 2.37 | 2.1 | 15.5 | 1.9 | 77.9 | 2.6 | do | 2188 |
| 2189 | Tennessee Amber, raised in Missouri | 9.41 | 1.88 | 10.50 | 1.85 | 74.01 | 2.35 | 2.1 | 12.7 | 2.0 | 81.6 | 2.6 | do | 2189 |
| | Varieties raised in Missouri. Maximum | 13.52 | 2.22 | 14.00 | 2.72 | 75.17 | 2.42 | 2.5 | 15.5 | 3.0 | 81.6 | 2.7 | | |
| | Varieties raised in Missouri. Minimum | 7.69 | 1.55 | 10.50 | 1.53 | 69.95 | 1.47 | 1.8 | 11.7 | 1.7 | 77.9 | 1.7 | | |
| | Varieties raised in Missouri. Average | **9.80** | **1.92** | **11.57** | **2.17** | **72.36** | **2.18** | **2.1** | **12.8** | **2.3** | **80.4** | **2.4** | | |
| 2190 | Raised in New Jersey on limestone land. | 13.30 | 2.09 | 11.39 | 1.90 | 69.62 | 1.70 | 2.4 | 13.1 | 2.2 | 80.3 | 2.0 | U. S. Census, 1880, vol. III, p. 415 | 2190 |
| 2191 | Raised in New Jersey on gray rock gravel soil | 13.67 | 1.82 | 12.50 | 1.93 | 68.34 | 1.74 | 2.1 | 14.5 | 2.2 | 79.2 | 2.0 | do | 2191 |
| | Raised in New Jersey, fertilizer, per acre— | | | | | | | | | | | | | |
| 2192 | None *b* | 13.64 | 2.03 | 11.00 | 1.64 | 70.07 | 1.62 | 2.3 | 12.7 | 1.9 | 81.2 | 1.9 | N. J. Ex. Sta. Rep., 1882, p. 59 | 2192 |
| 2193 | 22 pounds nitrogen *b* | 13.31 | 2.10 | 9.19 | 1.65 | 72.17 | 1.58 | 2.4 | 10.7 | 2.0 | 83.1 | 1.8 | do | 2193 |
| 2194 | 52½ pounds phosphoric acid *b* | 13.66 | 2.15 | 10.38 | 1.60 | 70.68 | 1.53 | 2.5 | 12.0 | 1.8 | 82.0 | 1.7 | do | 2194 |
| 2195 | 75 pounds potash *b* | 13.90 | 2.06 | 9.50 | 1.67 | 71.33 | 1.54 | 2.4 | 11.0 | 2.0 | 82.9 | 1.7 | do | 2195 |
| 2196 | 22 pounds nitrogen, 52½ pounds phosphoric acid *b* | 13.73 | 2.08 | 10.75 | 1.75 | 70.18 | 1.51 | 2.4 | 12.4 | 2.1 | 81.4 | 1.7 | do | 2196 |
| 2197 | None *b* | 13.51 | 2.06 | 10.38 | 1.71 | 70.83 | 1.51 | 2.3 | 12.0 | 2.0 | 82.0 | 1.7 | do | 2197 |
| 2198 | 22 pounds nitrogen, 75 pounds potash *b* | 13.75 | 2.04 | 10.06 | 1.71 | 71.04 | 1.40 | 2.4 | 11.7 | 2.1 | 82.2 | 1.6 | do | 2198 |
| 2199 | 52½ pounds phosphoric acid, 75 pounds potash *b* | 13.77 | 2.04 | 9.75 | 1.78 | 71.25 | 1.41 | 2.3 | 11.4 | 2.1 | 82.6 | 1.6 | do | 2199 |
| 2200 | 52½ pounds phosphoric acid, 75 pounds potash, 22 pounds nitrogen *b* | 13.90 | 2.04 | 9.19 | 1.70 | 71.53 | 1.64 | 2.4 | 10.7 | 2.0 | 82.8 | 2.1 | do | 2200 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2201 | 400 pounds plaster *b* | 13.73 | 2.02 | 9.94 | 1.76 | 70.99 | 1.56 | 2.3 | 11.6 | 2.0 | 82.2 | 1.9 | do | 2201 |
| 2202 | 20 two-horse loads of barnyard manure *b* | 13.95 | 2.05 | 9.19 | 2.04 | 71.28 | 1.49 | 2.4 | 10.7 | 2.4 | 82.5 | 2.0 | do | 2202 |
| | Varieties raised in New Jersey. Maximum | 13.95 | 2.15 | 12.50 | 2.04 | 72.17 | 1.74 | 2.5 | 14.5 | 2.4 | 83.1 | 2.1 | | |
| | Varieties raised in New Jersey. Minimum | 13.30 | 1.82 | 9.19 | 1.64 | 68.34 | 1.40 | 2.1 | 10.7 | 1.8 | 79.2 | 1.6 | | |
| | Varieties raised in New Jersey. Average | **13.68** | **2.04** | **10.25** | **1.76** | **70.72** | **1.55** | **2.3** | **11.8** | **2.1** | **82.1** | **1.7** | | |
| 2203 | White Winter, raised in New York | 13.07 | 1.63 | 10.63 | 1.79 | 71.23 | 1.65 | 1.9 | 12.2 | 2.1 | 81.9 | 1.9 | U. S. Census, 1880, vol. III, p. 415 | 2203 |
| 2204 | Red Winter, raised in New York | 13.30 | 1.70 | 13.60 | 1.73 | 68.08 | 1.59 | 2.0 | 15.7 | 2.0 | 78.5 | 1.8 | do | 2204 |
| 2205 | Landreth, raised in New York | 11.43 | 2.10 | 10.85 | 1.75 | 71.85 | 2.02 | 2.4 | 12.2 | 2.0 | 81.1 | 2.3 | U. S. Dept. Agr. Rep., 1883, p. 200 | 2205 |
| | Average, varieties raised in New York. | **12.60** | **1.81** | **11.69** | **1.76** | **70.38** | **1.76** | **2.1** | **13.3** | **2.1** | **80.4** | **2.1** | | |
| 2206 | Kivet, raised in North Carolina | 11.70 | 1.55 | 11.03 | 2.28 | 71.22 | 2.22 | 1.8 | 12.5 | 2.6 | 80.6 | 2.5 | U. S. Dept. Agr. Rep., 1883, p. 201 | 2206 |
| 2207 | Do | 11.65 | 1.80 | 8.93 | 1.65 | 73.86 | 2.11 | 2.0 | 10.1 | 1.9 | 83.6 | 2.4 | do | 2207 |
| 2208 | Do | 10.15 | 1.50 | 12.25 | 1.43 | 72.52 | 2.15 | 1.7 | 13.6 | 1.6 | 80.7 | 2.4 | do | 2208 |
| 2209 | Do | 10.90 | 1.50 | 9.98 | 2.12 | 73.18 | 2.32 | 1.7 | 11.2 | 2.4 | 82.1 | 2.6 | do | 2209 |
| 2210 | Rust-Proof, raised in North Carolina | 10.40 | 1.55 | 10.33 | 2.87 | 72.46 | 2.39 | 1.7 | 11.5 | 3.2 | 80.9 | 2.7 | do | 2210 |
| 2211 | Do | 10.60 | 1.45 | 10.15 | 2.84 | 72.63 | 2.33 | 1.6 | 11.4 | 3.2 | 81.2 | 2.6 | do | 2211 |
| 2212 | Do | 9.30 | 1.80 | 9.28 | 1.95 | 75.42 | 2.25 | 2.0 | 10.2 | 2.2 | 83.1 | 2.5 | do | 2212 |
| 2213 | Baltimore, raised in North Carolina | 9.55 | 1.60 | 9.98 | 1.54 | 75.05 | 2.28 | 1.8 | 11.0 | 1.7 | 83.0 | 2.5 | do | 2213 |
| 2214 | Do | 9.85 | 1.45 | 11.20 | 1.10 | 74.08 | 2.32 | 1.6 | 12.4 | 1.2 | 82.3 | 2.5 | do | 2214 |
| 2215 | Do | 9.65 | 1.65 | 9.10 | 1.00 | 76.35 | 2.25 | 1.8 | 10.1 | 1.1 | 84.5 | 2.5 | do | 2215 |
| 2216 | Do | 9.20 | 1.85 | 10.15 | 1.60 | 75.14 | 2.06 | 2.0 | 11.2 | 1.8 | 82.7 | 2.3 | do | 2216 |
| 2217 | Do | 9.70 | 1.65 | 11.38 | 1.63 | 73.48 | 2.16 | 1.8 | 12.6 | 1.8 | 81.4 | 2.4 | do | 2217 |
| 2218 | Purple Straw, raised in North Carolina | 9.40 | 1.70 | 10.15 | 1.70 | 74.58 | 2.47 | 1.9 | 11.2 | 1.9 | 82.3 | 2.7 | do | 2218 |
| 2219 | Do | 10.55 | 1.35 | 11.90 | 1.66 | 72.12 | 2.42 | 1.5 | 13.3 | 1.9 | 80.6 | 2.7 | do | 2219 |
| 2220 | Davis, raised in North Carolina | 8.45 | 1.75 | 11.73 | 2.53 | 73.26 | 2.28 | 1.9 | 12.8 | 2.8 | 80.0 | 2.5 | U. S. Dept. Agr. Rep., 1883, p. 202 | 2220 |
| 2221 | Do | 8.35 | 1.60 | 10.68 | 0.44 | 76.50 | 2.43 | 1.8 | 11.7 | 0.5 | 83.4 | 2.6 | do | 2221 |
| 2222 | Do | 11.05 | 1.55 | 12.43 | 1.81 | 70.85 | 2.31 | 1.8 | 14.0 | 2.1 | 79.5 | 2.6 | do | 2222 |
| 2223 | Earnhardt, raised in North Carolina | 10.92 | 1.30 | 9.98 | 1.63 | 74.07 | 2.10 | 1.5 | 11.2 | 1.8 | 83.1 | 2.4 | do | 2223 |
| 2224 | Golden Premium, raised in North Carolina | 10.66 | 1.70 | 9.63 | 1.54 | 74.44 | 2.03 | 1.9 | 10.8 | 1.7 | 83.3 | 2.3 | do | 2224 |
| 2225 | Winter Green, raised in North Carolina | 9.40 | 1.20 | 9.45 | 1.44 | 76.17 | 2.34 | 1.3 | 10.4 | 1.6 | 84.1 | 2.6 | do | 2225 |
| 2226 | Hicks Prolific, raised in North Carolina | 8.15 | 1.85 | 9.63 | 1.53 | 76.64 | 2.20 | 2.0 | 10.5 | 1.6 | 83.5 | 2.4 | do | 2226 |
| 2227 | White Australian, raised in North Carolina | 11.15 | 1.70 | 10.15 | 2.50 | 72.48 | 2.02 | 1.9 | 11.4 | 2.8 | 81.6 | 2.3 | do | 2227 |
| | Varieties raised in North Carolina. Maximum | 11.70 | 1.85 | 12.43 | 2.87 | 76.64 | 2.47 | 2.0 | 14.0 | 3.2 | 84.5 | 2.7 | | |
| | Varieties raised in North Carolina. Minimum | 8.15 | 1.20 | 8.93 | 0.44 | 70.85 | 2.02 | 1.3 | 10.1 | 0.5 | 79.5 | 2.3 | | |
| | Varieties raised in North Carolina. Average | **10.03** | **1.60** | **10.43** | **1.76** | **73.93** | **2.25** | **1.8** | **11.5** | **2.0** | **82.1** | **2.6** | | |
| 2228 | Swamp, raised in Ohio * | 7.63 | 1.84 | 11.59 | 1.54 | 74.99 | 2.41 | 2.0 | 12.6 | 1.7 | 81.1 | 2.6 | U. S. Dept. Agr. Rep., 1878, p. 147 | 2228 |
| 2229 | Michigan Amber, raised in Ohio | 11.30 | 1.99 | 11.73 | 1.78 | 71.80 | 1.40 | 2.2 | 13.2 | 2.0 | 81.0 | 1.6 | U. S. Dept. Agr. Rep., 1883, p. 202 | 2229 |

* In *loc. cit.*, sugar, gum, and albuminoids soluble and insoluble in alcohol are given.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GRAIN AND OTHER SEEDS—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| | Wheat, winter varieties—Continued. | | | | | | | | | | | | | |
| 2230 | Clawson, raised in Oregon | 12.99 | 1.77 | 10.50 | | 74.74 | | 2.0 | 12.1 | | 85.9 | | Mich. Bd. Agr. Rep., 1877, p. 350 | 2230 |
| 2231 | Sonora Club, raised in Oregon | 10.91 | 1.46 | 10.63 | | 77.00 | | 1.6 | 11.9 | | 86.5 | | Mich. Bd. Agr. Rep., 1877, p. 351 | 2231 |
| 2232 | Foizy, raised in Oregon* | 8.98 | 1.57 | 8.40 | 1.25 | 77.52 | 2.28 | 1.7 | 9.2 | 1.4 | 85.2 | 2.5 | U. S. Dept. Agr. Rep., 1878, p. 147 | 2232 |
| 2233 | Brazilian, raised in Oregon* | 9.29 | 1.77 | 9.45 | 1.17 | 76.33 | 1.99 | 2.0 | 10.4 | 1.3 | 84.1 | 2.2 | do | 2233 |
| 2234 | White, raised in Oregon* | 9.52 | 1.57 | 8.58 | 1.53 | 77.11 | 1.69 | 1.7 | 9.5 | 1.7 | 85.2 | 1.9 | do | 2234 |
| 2235 | Hudson Bay, raised in Oregon | 10.97 | 1.75 | 8.58 | 1.88 | 74.51 | 2.31 | 2.0 | 9.6 | 2.1 | 83.7 | 2.6 | U. S. Dept. Agr. Rep., 1883, p. 207 | 2235 |
| 2236 | Velvet Chaff, raised in Oregon | 10.92 | 1.95 | 8.05 | 1.68 | 75.60 | 1.80 | 2.2 | 9.1 | 1.9 | 84.8 | 2.0 | do | 2236 |
| | Varieties raised in Oregon: Maximum | 12.99 | 1.95 | 10.63 | 1.88 | 77.52 | 2.31 | 2.2 | 12.1 | 2.1 | 85.2 | 2.6 | | |
| | Varieties raised in Oregon: Minimum | 8.98 | 1.46 | 8.05 | 1.17 | 74.51 | 1.69 | 1.6 | 9.1 | 1.3 | 83.7 | 1.9 | | |
| | Varieties raised in Oregon: Average | **9.93** | **1.72** | **8.61** | **1.50** | **76.22** | **2.02** | **1.9** | **9.5** | **1.7** | **84.7** | **2.2** | | |
| 2237 | Fertilizer, none; raised in Pennsylvania | 13.33 | 2.04 | 10.86 | 2.76 | 69.02 | 1.99 | 2.3 | 12.5 | 3.2 | 79.7 | 2.3 | U. S. Dept. Agr. Rep., 1882, p. 200 | 2237 |
| 2238 | Fertilizer, phosphoric acid and potash; raised in Pennsylvania. | 13.04 | 1.99 | 10.50 | 2.65 | 69.85 | 1.97 | 2.3 | 12.0 | 3.1 | 80.3 | 2.3 | do | 2238 |
| 2239 | Fertilizer, phosphoric acid, potash, and nitrogen; raised in Pennsylvania. | 13.16 | 2.03 | 11.16 | 2.51 | 69.24 | 1.90 | 2.3 | 12.9 | 2.9 | 79.7 | 2.2 | do | 2239 |
| 2240 | Fertilizer, phosphoric acid, potash, and double ration of nitrogen; raised in Pennsylvania. | 13.06 | 2.98 | 11.69 | 2.45 | 67.90 | 1.90 | 3.5 | 13.4 | 2.9 | 78.0 | 2.2 | do | 2240 |
| 2241 | Fertilizer, phosphoric acid, potash, and triple ration of nitrogen; raised in Pennsylvania. | 12.59 | 1.83 | 11.70 | 2.53 | 69.53 | 1.92 | 2.1 | 13.3 | 2.9 | 79.5 | 2.2 | do | 2241 |
| 2242 | Manured, raised in Pennsylvania | 12.41 | 2.09 | 11.04 | 2.37 | 70.10 | 1.89 | 2.4 | 12.7 | 2.7 | 80.0 | 2.2 | do | 2242 |
| 2243 | Champion Amber, raised in Pennsylvania | 8.95 | 1.90 | 11.03 | 1.35 | 74.56 | 2.21 | 2.1 | 12.2 | 1.5 | 81.8 | 2.4 | do | 2243 |
| 2244 | Lemon, raised in Pennsylvania | 8.35 | 1.90 | 15.58 | 1.53 | 70.13 | 2.51 | 2.1 | 17.0 | 1.6 | 76.6 | 2.7 | do | 2244 |
| 2245 | Gold Medal, raised in Pennsylvania | 8.60 | 1.80 | 9.80 | 1.38 | 76.05 | 2.37 | 2.0 | 10.7 | 1.5 | 83.2 | 2.6 | do | 2245 |
| 2246 | German Amber, raised in Pennsylvania | 7.60 | 1.70 | 11.03 | 1.05 | 75.98 | 2.64 | 1.8 | 12.0 | 1.1 | 82.2 | 2.9 | do | 2246 |
| 2247 | Washington Glass, raised in Pennsylvania | 8.45 | 2.05 | 12.08 | 1.75 | 73.44 | 2.23 | 2.3 | 13.2 | 1.9 | 80.2 | 2.4 | do | 2247 |
| 2248 | Swamp, raised in Pennsylvania | 9.95 | 1.65 | 12.78 | 1.55 | 71.94 | 2.13 | 1.8 | 14.1 | 1.8 | 80.0 | 2.3 | do | 2248 |
| 2249 | Heiges Prolific, raised in Pennsylvania | 10.00 | 1.15 | 10.68 | 1.33 | 75.07 | 1.77 | 1.2 | 11.8 | 1.4 | 83.6 | 2.0 | do | 2249 |
| 2250 | Glick, raised in Pennsylvania | 11.55 | 1.80 | 12.25 | 1.80 | 70.50 | 2.10 | 2.0 | 13.9 | 2.0 | 80.0 | 2.1 | do | 2250 |
| 2251 | Champion Amber, raised in Pennsylvania | 9.90 | 1.85 | 11.20 | 1.90 | 72.74 | 2.41 | 2.1 | 12.4 | 2.1 | 80.7 | 2.7 | do | 2251 |
| 2252 | Mediterranean White Chaff, raised in Pennsylvania | 10.05 | 1.70 | 12.08 | 1.83 | 72.04 | 2.30 | 1.9 | 13.4 | 2.0 | 80.1 | 2.6 | do | 2252 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2253 | Sandanika, raised in Pennsylvania | 11.30 | 1.30 | 12.60 | 1.60 | 71.05 | 2.15 | 1.5 | 14.1 | 1.8 | 80.1 | 2.5 | do | 2253 |
| 2254 | Fultz, raised in Pennsylvania | 11.40 | 0.90 | 10.50 | 0.90 | 74.79 | 1.51 | 1.0 | 11.8 | 1.0 | 84.5 | 1.7 | do | 2254 |
| 2255 | Gold Dust, raised in Pennsylvania | 11.45 | 0.80 | 10.50 | 1.03 | 74.61 | 1.61 | 0.9 | 11.8 | 1.1 | 84.4 | 1.8 | do | 2255 |
| 2256 | Eureka, raised in Pennsylvania | 10.50 | 1.35 | 11.55 | 1.60 | 72.86 | 2.14 | 1.6 | 12.9 | 1.8 | 81.4 | 2.3 | do | 2256 |
| 2257 | Washington Glass, raised in Pennsylvania | 10.40 | 1.05 | 11.55 | 1.23 | 73.87 | 1.90 | 1.2 | 12.9 | 2.0 | 81.8 | 2.1 | do | 2257 |
| 2258 | Clawson, raised in Pennsylvania | 10.60 | 1.60 | 11.38 | 2.23 | 72.10 | 2.09 | 1.8 | 12.7 | 2.5 | 80.7 | 2.3 | do | 2258 |
| 2259 | Gold Medal, raised in Pennsylvania | 11.45 | 0.90 | 10.68 | 0.98 | 74.60 | 1.39 | 1.0 | 12.0 | 1.1 | 84.3 | 1.6 | do | 2259 |
| 2260 | Mountain, raised in Pennsylvania | 9.50 | 1.70 | 9.98 | 1.32 | 75.12 | 2.38 | 1.9 | 11.1 | 1.4 | 82.9 | 2.7 | do | 2260 |
| 2261 | Mediterranean, raised in Pennsylvania | 8.85 | 1.65 | 11.55 | 1.25 | 74.45 | 2.25 | 1.9 | 12.7 | 1.4 | 81.5 | 2.5 | do | 2261 |
| 2262 | Fultz, raised in Pennsylvania | 9.55 | 1.80 | 9.45 | 1.70 | 75.20 | 2.30 | 2.0 | 10.4 | 1.9 | 83.2 | 2.5 | do | 2262 |
| 2263 | Do | 11.00 | 1.40 | 11.38 | 1.73 | 72.38 | 2.11 | 1.6 | 12.8 | 1.9 | 81.3 | 2.4 | do | 2263 |
| 2264 | Clawson, raised in Pennsylvania | 11.35 | 1.90 | 11.20 | 1.75 | 71.90 | 1.90 | 2.1 | 12.5 | 2.0 | 81.3 | 2.1 | do | 2264 |
| 2265 | Hybrid, raised in Pennsylvania | 11.50 | 1.50 | 11.20 | 1.78 | 71.80 | 2.22 | 1.7 | 12.6 | 2.0 | 81.2 | 2.5 | do | 2265 |
| 2266 | Burkholder, raised in Pennsylvania | 10.78 | 1.93 | 10.15 | 1.69 | 73.53 | 1.92 | 2.1 | 11.4 | 1.9 | 82.5 | 2.1 | do | 2266 |
| 2267 | Pennsylvania Amber, raised in Pennsylvania. | 10.72 | 1.98 | 11.38 | 1.95 | 72.06 | 1.91 | 2.2 | 12.7 | 2.2 | 80.8 | 2.1 | do | 2267 |
| 2268 | Fultz, raised in Pennsylvania | 11.45 | 1.97 | 13.65 | 1.86 | 69.61 | 1.46 | 2.3 | 15.4 | 2.1 | 78.5 | 1.7 | do | 2268 |
| 2269 | McGhee White, raised in Pennsylvania, crop of 1886.† | 9.65 | 1.21 | 13.82 | 1.18 | 72.66 | 1.48 | 1.3 | 15.3 | 1.3 | 80.5 | 1.6 | Pa. Ex. Sta. Rep., 1887, p. 108 | 2269 |
| 2270 | McGhee White, raised in Pennsylvania, crop of 1887.† | 11.10 | 1.40 | 12.61 | 1.58 | 71.58 | 1.73 | 1.6 | 14.2 | 1.8 | 80.4 | 2.0 | do | 2270 |
| 2271 | Martin Amber, raised in Pennsylvania, crop of 1886.† | 10.10 | 1.15 | 13.14 | 1.13 | 72.43 | 2.05 | 1.3 | 14.6 | 1.3 | 80.5 | 2.3 | do | 2271 |
| 2272 | Extra Early Oakley, raised in Pennsylvania, crop of 1886.† | 10.00 | 1.25 | 14.78 | 1.30 | 70.91 | 1.76 | 1.4 | 16.4 | 1.4 | 78.8 | 2.0 | do | 2272 |
| 2273 | Extra Early Oakley, raised in Pennsylvania, crop of 1887.† | 11.40 | 1.20 | 11.55 | 1.15 | 73.10 | 1.60 | 1.4 | 13.0 | 1.3 | 82.5 | 1.8 | do | 2273 |
| 2274 | Diehl Mediterranean, raised in Pennsylvania, crop of 1886.† | 10.90 | 1.50 | 14.00 | 1.55 | 70.40 | 1.65 | 1.7 | 15.7 | 1.7 | 79.0 | 1.9 | do | 2274 |
| 2275 | Fulcaster, raised in Pennsylvania, crop of 1887.† | 10.90 | 1.35 | 14.18 | 1.53 | 69.44 | 2.60 | 1.5 | 16.0 | 1.7 | 77.9 | 2.9 | do | 2275 |
| 2276 | German Emperor, raised in Pennsylvania, crop of 1887.† | 10.90 | 1.70 | 12.61 | 1.73 | 70.82 | 2.24 | 1.9 | 14.2 | 1.9 | 79.5 | 2.5 | do | 2276 |
| 2277 | Raub Black Prolific, raised in Pennsylvania, crop of 1887.† | 11.00 | 1.50 | 14.07 | 1.66 | 70.02 | 1.75 | 1.7 | 15.8 | 1.9 | 78.7 | 1.9 | do | 2277 |
| | Varieties raised in Pennsylvania. Maximum | 13.33 | 2.98 | 15.58 | 2.76 | 76.05 | 2.64 | 3.5 | 17.0 | 3.2 | 84.5 | 2.9 | | |
| | Varieties raised in Pennsylvania. Minimum | 7.60 | 0.80 | 9.45 | 0.90 | 67.90 | 1.39 | 0.9 | 10.4 | 1.0 | 76.6 | 1.6 | | |
| | Varieties raised in Pennsylvania. Average | **10.70** | **1.62** | **11.83** | **1.66** | **72.18** | **2.01** | **1.8** | **13.2** | **1.9** | **80.9** | **2.2** | | |
| 2278 | Swamp, raised in Tennessee | 7.10 | 2.10 | 16.63 | 1.85 | 70.24 | 2.08 | 2.3 | 17.9 | 2.0 | 75.6 | 2.2 | U. S. Dept. Agr. Rep., 1883, p. 204 | 2278 |
| 2279 | Tennessee Amber, raised in Tennessee | 9.90 | 1.85 | 11.90 | 1.48 | 72.78 | 2.09 | 2.1 | 13.2 | 1.6 | 80.8 | 2.3 | do | 2279 |
| 2280 | Spark Swamp, raised in Tennessee | 10.24 | 1.80 | 11.55 | 1.73 | 72.37 | 2.31 | 2.0 | 12.9 | 1.9 | 80.6 | 2.6 | do | 2280 |
| 2281 | Rice, raised in Tennessee | 9.19 | 2.04 | 9.98 | 2.24 | 74.40 | 2.15 | 2.2 | 11.0 | 2.5 | 81.9 | 2.4 | do | 2281 |
| 2282 | White Mediterranean, raised in Tennessee | 10.92 | 2.37 | 15.23 | 2.86 | 66.71 | 1.90 | 2.7 | 17.1 | 3.2 | 74.9 | 2.1 | do | 2282 |
| 2283 | Do | 10.64 | 2.10 | 10.15 | 2.20 | 72.87 | 2.04 | 2.3 | 11.4 | 2.5 | 81.5 | 2.3 | do | 2283 |
| 2284 | Red, raised in Tennessee | 11.85 | 1.90 | 10.85 | 1.83 | 71.77 | 2.00 | 2.2 | 12.3 | 2.1 | 81.1 | 2.3 | do | 2284 |
| 2285 | Tennessee Amber, raised in Tennessee | 9.90 | 1.85 | 11.90 | 1.48 | 72.78 | 2.09 | 2.1 | 13.2 | 1.6 | 80.8 | 2.3 | do | 2285 |
| 2286 | Do | 11.10 | 1.62 | 12.60 | 1.67 | 70.95 | 2.06 | 1.8 | 14.2 | 1.9 | 79.8 | 2.3 | do | 2286 |

* In *loc. cit.*, sugar, gum, and albuminoids, soluble and insoluble in alcohol are given.

† In *loc. cit.*, moist and dry crude gluten are given.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **GRAIN AND OTHER SEEDS—Continued.** | | | | | | | | | | | | | |
| | Wheat, winter varieties—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 2287 | Bearded, raised in Tennessee | 11.30 | 1.90 | 12.43 | 2.54 | 69.71 | 2.12 | 2.1 | 14.1 | 2.9 | 78.5 | 2.4 | U. S. Dept. Agr. Rep., 1883, p. 204 | 2287 |
| 2288 | Fultz, raised in Tennessee | 10.64 | 1.60 | 12.60 | 2.13 | 70.87 | 2.16 | 1.8 | 14.1 | 2.4 | 79.3 | 2.4 | do | 2288 |
| 2289 | Do | 10.66 | 1.92 | 12.08 | 2.36 | 71.11 | 1.87 | 2.1 | 13.5 | 2.6 | 79.7 | 2.1 | do | 2289 |
| 2290 | California Gold Chaff, raised in Tennessee | 10.26 | 1.72 | 15.40 | 2.21 | 68.72 | 1.69 | 1.9 | 17.2 | 2.5 | 76.5 | 1.9 | do | 2290 |
| 2291 | Swamp, raised in Tennessee | 8.95 | 1.65 | 11.90 | 1.70 | 73.60 | 2.20 | 1.8 | 13.1 | 1.9 | 80.8 | 2.4 | do | 2291 |
| | Varieties raised in Tennessee. Maximum | 11.85 | 2.37 | 16.63 | 2.86 | 74.40 | 2.31 | 2.7 | 17.9 | 3.2 | 81.9 | 2.6 | | |
| | Varieties raised in Tennessee. Minimum | 7.10 | 1.60 | 9.98 | 1.48 | 66.71 | 1.69 | 1.8 | 11.0 | 1.6 | 74.9 | 1.9 | | |
| | Varieties raised in Tennessee. Average | **10.19** | **1.89** | **12.51** | **2.02** | **71.33** | **2.06** | **2.1** | **13.9** | **2.2** | **79.5** | **2.3** | | |
| 2292 | Red Mediterranean, raised in Texas | 8.88 | 2.02 | 15.23 | 2.09 | 69.44 | 2.34 | 2.2 | 16.7 | 2.3 | 76.2 | 2.6 | U. S. Dept. Agr. Rep., 1883, p. 205 | 2292 |
| 2293 | Do | 11.61 | 1.69 | 12.08 | 1.92 | 70.62 | 2.08 | 1.9 | 13.7 | 2.2 | 79.8 | 2.4 | do | 2293 |
| 2294 | White Mediterranean, raised in Texas | 12.05 | 2.02 | 13.48 | 1.91 | 68.95 | 1.59 | 2.3 | 15.3 | 2.2 | 78.4 | 1.8 | do | 2294 |
| 2295 | Nicaraguan, raised in Texas | 9.94 | 1.58 | 11.73 | 1.71 | 72.75 | 2.29 | 1.8 | 13.0 | 1.9 | 80.7 | 2.6 | do | 2295 |
| | Average, varieties raised in Texas | **10.62** | **1.83** | **13.13** | **1.91** | **70.44** | **2.07** | **2.0** | **14.7** | **2.1** | **78.9** | **2.3** | | |
| 2296 | Cross, raised in Vermont | 10.87 | 1.75 | 10.69 | 2.52 | 72.13 | 2.04 | 2.0 | 12.0 | 2.8 | 80.9 | 2.3 | U. S. Dept. Agr. Rep., 1883, p. 200 | 2296 |
| 2297 | McGhee Red, raised in Virginia | 8.80 | 1.05 | 13.65 | 1.48 | 72.53 | 2.49 | 1.2 | 15.0 | 1.6 | 79.5 | 2.7 | U. S. Dept. Agr. Rep., 1883, p. 201 | 2297 |
| 2298 | Finlay, raised in Virginia | 9.45 | 1.60 | 11.72 | 1.18 | 73.65 | 2.38 | 1.8 | 12.9 | 1.3 | 81.4 | 2.6 | do | 2298 |
| 2299 | Hybrid, raised in Virginia | 11.54 | 1.65 | 12.78 | 1.73 | 70.30 | 2.00 | 1.9 | 14.5 | 1.9 | 79.4 | 2.3 | do | 2299 |
| 2300 | Shenandoah 1, raised in Virginia | 9.45 | 2.45 | 14.00 | 1.90 | 70.02 | 2.18 | 2.7 | 15.5 | 2.1 | 77.3 | 2.4 | do | 2300 |
| 2301 | Shenandoah 2, raised in Virginia | 11.15 | 1.60 | 10.15 | 1.78 | 72.76 | 2.56 | 1.8 | 11.4 | 2.0 | 81.9 | 2.9 | do | 2301 |
| 2302 | Shenandoah 3, raised in Virginia | 9.28 | 2.00 | 11.55 | 1.65 | 73.16 | 2.38 | 2.2 | 12.7 | 1.8 | 80.7 | 2.6 | do | 2302 |
| 2303 | Harrison, raised in Virginia | 11.14 | 1.86 | 11.73 | 1.70 | 71.11 | 2.46 | 2.1 | 13.2 | 1.9 | 80.0 | 2.8 | do | 2303 |
| 2304 | McGhee White, raised in Virginia | 9.35 | 1.60 | 12.43 | 1.96 | 72.81 | 1.85 | 1.8 | 13.7 | 2.2 | 80.3 | 2.0 | do | 2304 |
| 2305 | Dallas, raised in Virginia | 12.26 | 1.58 | 12.78 | 1.96 | 69.59 | 1.83 | 1.8 | 14.6 | 2.2 | 79.3 | 2.1 | do | 2305 |
| 2306 | Fultz-Clawson, raised in Virginia | 12.10 | 1.80 | 10.50 | 1.75 | 71.84 | 2.01 | 2.1 | 11.9 | 2.0 | 81.7 | 2.3 | do | 2306 |
| 2307 | Wysor, raised in Virginia | 9.25 | 1.55 | 12.60 | 1.73 | 72.71 | 2.16 | 1.7 | 13.9 | 1.9 | 80.1 | 2.4 | do | 2307 |
| | Varieties raised in Virginia. Maximum | 12.26 | 2.45 | 14.00 | 1.96 | 73.65 | 2.56 | 2.7 | 15.5 | 2.2 | 81.9 | 2.9 | | |
| | Varieties raised in Virginia. Minimum | 8.80 | 1.05 | 10.15 | 1.18 | 69.59 | 1.83 | 1.2 | 11.4 | 1.3 | 77.3 | 2.0 | | |
| | Varieties raised in Virginia. Average | **10.34** | **1.69** | **12.17** | **1.71** | **71.87** | **2.22** | **1.9** | **13.6** | **1.9** | **80.1** | **2.5** | | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2308 | Fultz, raised in Wisconsin | 12.34 | 1.89 | 11.09 | 1.76 | 71.30 | 1.62 | 2.2 | 12.7 | 2.0 | 81.2 | 1.9 | U. S. Census, 1880, vol. III, p. 414 | | 2308 |
| 2309 | Buckeye or White Wabash, locality not given | 12.73 | 1.38 | 10.97 | | 74.92 | | 1.6 | 12.7 | | 85.7 | | Mich. Bd. Agr. Rep., 1877, p. 350 | | 2309 |
| 2310 | Fultz, locality not given | 10.40 | 1.15 | 11.90 | 1.71 | 72.39 | 2.45 | 1.3 | 13.3 | 1.9 | 80.8 | 2.7 | U. S. Dept. Agr. Rep., 1879, p. 100 | | 2310 |
| 2311 | Red, locality not given | 10.19 | 1.84 | 9.94 | 1.84 | 74.17 | 2.02 | 2.0 | 11.1 | 2.0 | 82.6 | 2.3 | N. J. Ex. Sta. Rep., 1881, p. 52 | | 2311 |
| 2312 | White, locality not given | 11.15 | 1.72 | 10.10 | 1.21 | 73.85 | 1.97 | 1.9 | 11.4 | 1.4 | 83.1 | 2.2 | do | | 2312 |
| 2313 | Fultz, locality not given | 9.93 | 1.82 | 9.81 | 1.89 | 74.65 | 1.90 | 2.0 | 10.9 | 2.1 | 82.9 | 2.1 | do | | 2313 |
| 2314 | No. 2 Red Winter, locality not given | 12.84 | 1.86 | 10.94 | 1.79 | 71.04 | 1.53 | 2.1 | 12.6 | 2.0 | 81.5 | 1.8 | U. S. Census, 1880, vol. III, p. 414 | | 2314 |
| 2315 | McGhee White, locality not given* | 8.82 | 1.37 | 11.47 | 1.16 | 75.37 | 1.81 | 1.5 | 12.6 | 1.3 | 82.6 | 2.0 | Penn. Ex. Sta. Rep., 1887, p. 108 | | 2315 |
| 2316 | Martin Amber locality not given* | 8.72 | 1.55 | 10.70 | 1.48 | 75.39 | 2.16 | 1.7 | 11.7 | 1.6 | 82.6 | 2.4 | do | | 2316 |
| 2317 | Extra Early Oakley, locality not given* | 10.83 | 1.40 | 2.18 | 1.38 | 72.65 | 1.56 | 1.5 | 13.7 | 1.5 | 81.5 | 1.8 | do | | 2317 |
| 2318 | Diehl Mediterranean, locality not given* | 9.35 | 1.21 | 8.75 | 1.18 | 77.74 | 1.77 | 1.3 | 9.7 | 1.3 | 85.7 | 2.0 | do | | 2318 |
| 2319 | Fulcaster, locality not given* | 10.60 | 1.39 | 13.03 | 1.53 | 71.69 | 1.85 | 1.5 | 14.6 | 1.7 | 80.2 | 2.0 | do | | 2319 |
| 2320 | German Emperor, locality not given* | 10.40 | 1.05 | 10.86 | 1.93 | 73.91 | 1.85 | 1.2 | 12.1 | 2.2 | 82.4 | 2.1 | do | | 2320 |
| 2321 | Raub Black Prolific, locality not given* | 10.20 | 1.35 | 10.77 | 2.70 | 73.38 | 1.60 | 1.5 | 12.0 | 3.0 | 81.7 | 1.8 | do | | 2321 |
| | All complete analyses of winter wheat. Maximum | 13.95 | 3.57 | 16.63 | 2.87 | 77.74 | 3.93 | 3.5 | 17.9 | 3.2 | 85.7 | 4.3 | | | |
| | All complete analyses of winter wheat. Minimum | 7.10 | 0.80 | 8.05 | 0.44 | 66.71 | 1.26 | 0.9 | 9.1 | 0.5 | 74.9 | 1.6 | | | |
| | All complete analyses of winter wheat. Average | **10.52** | **1.83** | **11.77** | **1.75** | **72.04** | **2.09** | **2.0** | **13.1** | **2.0** | **80.6** | **2.3** | | | |
| | Wheat, unclassified: | | | | | | | | | | | | | | |
| 2322 | Variety unknown, raised in Kansas | 11.58 | 1.72 | 10.85 | 2.01 | 71.86 | 1.98 | 1.9 | 12.1 | 2.2 | 81.6 | 2.2 | U. S. Dept. Agr. Rep., 1883, p. 205 | | 2322 |
| 2323 | Do | 11.77 | 1.84 | 11.20 | 1.97 | 71.15 | 2.07 | 2.0 | 12.7 | 2.3 | 80.7 | 2.3 | do | | 2323 |
| 2324 | Do | 11.60 | 1.78 | 10.50 | 1.89 | 72.19 | 2.04 | 2.0 | 11.8 | 2.2 | 81.7 | 2.3 | do | | 2324 |
| 2325 | Do | 11.36 | 1.54 | 12.25 | 2.76 | 70.18 | 1.91 | 1.7 | 13.8 | 3.2 | 79.2 | 2.1 | do | | 2325 |
| 2326 | Do | 11.57 | 1.47 | 11.03 | 1.62 | 72.29 | 2.02 | 1.7 | 12.3 | 1.9 | 81.8 | 2.3 | do | | 2326 |
| 2327 | Do | 12.38 | 1.58 | 10.50 | 1.75 | 71.96 | 1.83 | 1.8 | 11.9 | 2.0 | 82.3 | 2.0 | do | | 2327 |
| 2328 | Do | 12.27 | 1.61 | 11.90 | 2.09 | 70.12 | 2.01 | 1.8 | 13.6 | 2.4 | 79.9 | 2.3 | do | | 2328 |
| 2329 | Do | 12.10 | 1.70 | 10.85 | 1.66 | 71.73 | 1.96 | 1.9 | 12.4 | 1.9 | 81.5 | 2.3 | do | | 2329 |
| 2330 | Do | 11.62 | 1.66 | 10.68 | 3.05 | 70.87 | 2.12 | 1.8 | 12.0 | 3.4 | 80.4 | 2.4 | do | | 2330 |
| 2331 | Do | 11.76 | 1.50 | 11.73 | 2.03 | 71.15 | 1.83 | 1.7 | 13.2 | 2.3 | 80.8 | 2.0 | do | | 2331 |
| 2332 | Fife No. 1, raised in Minnesota | 12.34 | 1.59 | 13.06 | 2.03 | | | 1.8 | 14.9 | 2.4 | | | U. S. Dept. Agr. Rep., 1883, p. 204 | | 2332 |
| 2333 | Fife No. 2, raised in Minnesota | 11.31 | 1.92 | 13.00 | 2.37 | | | 2.1 | 14.7 | 2.7 | | | do | | 2333 |
| 2334 | Fife No. 3, raised in Minnesota | 11.85 | 1.97 | 13.56 | 2.50 | | | 2.2 | 15.3 | 2.8 | | | do | | 2334 |
| 2335 | Egyptian, raised in Minnesota | 10.44 | 1.95 | 13.30 | 1.55 | 70.99 | 1.77 | 2.2 | 14.8 | 1.8 | 79.2 | 2.0 | do | | 2335 |
| 2336 | Scotch Fife, raised in Minnesota | 10.62 | 1.90 | 10.85 | 2.31 | 72.24 | 2.08 | 2.1 | 12.2 | 2.6 | 80.8 | 2.3 | do | | 2336 |
| 2337 | Red Fern, raised in Minnesota | 11.74 | 1.91 | 17.15 | 2.20 | 64.84 | 2.16 | 2.2 | 19.4 | 2.5 | 73.4 | 2.5 | do | | 2337 |
| 2338 | Fife, raised in Minnesota | 10.31 | 1.79 | 13.48 | 2.89 | 69.37 | 2.16 | 2.0 | 15.0 | 3.2 | 77.4 | 2.4 | do | | 2338 |
| 2339 | Old Settlers, raised in Minnesota | 10.10 | 1.57 | 12.43 | 1.81 | 72.26 | 1.83 | 1.8 | 13.8 | 2.0 | 80.4 | 2.0 | do | | 2339 |
| 2340 | Red Fern, raised in Minnesota | 10.08 | 1.43 | 12.25 | 1.96 | 72.09 | 2.19 | 1.6 | 13.6 | 2.2 | 80.4 | 2.2 | do | | 2340 |
| 2341 | Fife, raised in Minnesota | 11.34 | 1.50 | 11.55 | 1.82 | 71.77 | 2.02 | 1.7 | 13.0 | 2.0 | 80.9 | 2.4 | do | | 2341 |
| 2342 | Golden Drop, raised in Minnesota | 11.10 | 1.53 | 11.55 | 1.96 | 71.97 | 1.89 | 1.7 | 13.1 | 2.3 | 80.7 | 2.2 | U. S. Dept. Agr. Rep., 1883, p. 205 | | 2342 |
| 2343 | White Fife, raised in Minnesota | 9.70 | 1.80 | 11.38 | 1.88 | 73.05 | 2.19 | 2.0 | 12.6 | 2.1 | 80.9 | 2.4 | do | | 2343 |
| 2344 | Variety unknown, raised in Texas | 10.64 | 1.92 | 12.43 | 2.39 | 70.23 | 2.39 | 2.1 | 13.8 | 2.7 | 78.7 | 2.7 | do | | 2344 |
| 2345 | Do | 9.70 | 1.66 | 12.95 | 1.99 | 71.14 | 2.56 | 1.9 | 14.4 | 2.2 | 78.6 | 2.9 | do | | 2345 |
| 2346 | Do | 9.26 | 2.18 | 14.35 | 2.08 | 70.19 | 1.94 | 2.4 | 15.8 | 2.4 | 77.2 | 2.2 | do | | 2346 |
| 2347 | Do | 9.36 | 1.64 | 13.65 | 2.25 | 70.95 | 2.15 | 1.8 | 15.1 | 2.5 | 78.2 | 2.4 | do | | 2347 |
| 2348 | Do | 9.50 | 1.60 | 11.03 | 2.01 | 73.86 | 2.00 | 1.8 | 12.2 | 2.2 | 81.6 | 2.2 | do | | 2348 |
| 2349 | Do | 9.50 | 1.94 | 13.65 | 1.89 | 71.13 | 1.89 | 2.2 | 15.0 | 2.1 | 78.6 | 2.1 | do | | 2349 |
| 2350 | Do | 9.66 | 2.43 | 14.18 | 2.19 | 69.68 | 1.86 | 2.7 | 15.7 | 2.4 | 77.1 | 2.1 | do | | 2350 |
| 2351 | Do | 10.26 | 1.86 | 13.65 | 1.90 | 70.37 | 1.96 | 2.1 | 15.1 | 2.1 | 78.5 | 2.2 | do | | 2351 |

* In *loc. cit.*, moist and dry crude gluten are given.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GRAIN AND OTHER SEEDS—Continued. | | | | | | | | | | | | | |
| | Wheat, unclassified—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 2352 | Variety unknown, raised in Texas | 10.24 | 1.72 | 12.60 | 2.22 | 71.46 | 1.76 | 2.0 | 14.2 | 2.5 | 79.3 | 2.0 | U. S. Dept. Agr. Rep., 1883, p. 205 | 2352 |
| 2353 | Do | 10.00 | 1.52 | 14.00 | 2.01 | 70.55 | 1.92 | 1.7 | 15.6 | 2.2 | 78.4 | 2.1 | do | 2353 |
| 2354 | Do | 9.62 | 1.68 | 14.00 | 2.19 | 70.79 | 1.72 | 1.9 | 15.5 | 2.4 | 78.3 | 1.9 | do | 2354 |
| 2355 | Nicaraguan, raised in Texas | 10.00 | 1.72 | 14.70 | 2.20 | 69.55 | 1.83 | 1.9 | 16.3 | 2.4 | 77.4 | 2.0 | do | 2355 |
| 2356 | Variety unknown, raised in Texas | 10.28 | 1.80 | 10.68 | 2.05 | 72.73 | 2.46 | 2.0 | 11.9 | 2.3 | 81.1 | 2.7 | do | 2356 |
| 2357 | Do | 10.04 | 1.76 | 12.60 | 2.19 | 70.95 | 2.46 | 2.0 | 13.9 | 2.3 | 79.0 | 2.8 | do | 2357 |
| 2358 | Do | 10.00 | 1.76 | 12.60 | 2.03 | 70.78 | 2.83 | 2.0 | 13.9 | 2.1 | 78.9 | 3.1 | do | 2358 |
| 2359 | Do | 9.05 | 2.06 | 12.43 | 2.33 | 71.67 | 2.46 | 2.2 | 13.6 | 2.5 | 79.0 | 2.7 | U. S. Dept. Agr. Bul. 4, p. 40 | 2359 |
| | Wheat, all complete analyses of all varieties. Maximum | 13.95 | 3.57 | 17.15 | 3.05 | 78.66 | 3.93 | 3.5 | 17.9 | 3.4 | 85.7 | 4.3 | | |
| | Wheat, all complete analyses of all varieties. Minimum | 7.10 | 0.80 | 8.05 | 0.44 | 64.84 | 1.26 | 0.9 | 8.8 | 0.5 | 73.4 | 1.6 | | |
| | Wheat, all complete analyses of all varieties. Average | **10.52** | **1.83** | **11.87** | **1.79** | **71.90** | **2.09** | **2.0** | **13.3** | **2.0** | **80.4** | **2.3** | | |
| | Wheat, inferior, rusted and frosted, raised in Minnesota: | | | | | | | | | | | | | |
| 2360 | Grade No. 2, Northern, 2 pounds off *a** | 9.52 | 1.06 | 14.56 | 2.90 | 69.80 | 2.16 | 1.2 | 16.1 | 3.2 | 77.2 | 2.3 | Minn. Ex. Sta. Bul. 7, 1889 | 2360 |
| 2361 | Grade No. 1, Northern, 2½ pounds off *a** | 9.71 | 1.50 | 13.38 | 2.02 | 71.26 | 2.13 | 1.7 | 14.8 | 2.2 | 79.0 | 2.3 | do | 2361 |
| 2362 | No grade *a** | 8.82 | 1.75 | 13.75 | 1.86 | 71.46 | 2.36 | 2.0 | 15.0 | 2.0 | 78.4 | 2.6 | do | 2362 |
| 2363 | No. 3, 1 pound off * | 9.76 | 1.75 | 14.88 | 1.91 | 69.45 | 2.25 | 2.0 | 16.5 | 2.1 | 76.8 | 2.6 | do | 2363 |
| 2364 | No. 1, hard, 2 pounds off *a** | 10.30 | 2.14 | 14.88 | 3.20 | 67.40 | 2.08 | 2.3 | 16.6 | 3.5 | 75.3 | 2.3 | do | 2364 |
| 2365 | No grade, 2 pounds off *a** | 10.05 | 1.63 | 14.25 | 1.10 | 70.79 | 2.18 | 1.8 | 15.8 | 1.2 | 78.8 | 2.4 | do | 2365 |
| 2366 | No. 3, 2 pounds off * | 11.57 | 1.62 | 13.13 | 1.08 | 69.85 | 2.75 | 1.8 | 14.8 | 1.2 | 79.1 | 3.1 | do | 2366 |
| 2367 | Do *a** | 9.11 | 1.71 | 14.63 | 1.67 | 70.01 | 2.87 | 1.9 | 16.0 | 1.8 | 77.1 | 3.2 | do | 2367 |
| 2368 | No. 1, Northern, 2 pounds off *a** | 11.16 | 1.72 | 13.56 | 1.49 | 70.08 | 1.99 | 1.9 | 15.2 | 1.7 | 78.9 | 2.3 | do | 2368 |
| 2369 | No. 3, 1½ pounds off *a** | 11.78 | 1.33 | 13.69 | 2.23 | 68.72 | 2.25 | 1.5 | 15.5 | 2.5 | 78.0 | 2.5 | do | 2369 |
| 2370 | Saskatchewan Fife *a*† | 9.89 | 2.80 | 17.94 | 3.36 | 62.08 | 3.93 | 3.1 | 19.8 | 3.8 | 69.0 | 4.3 | do | 2370 |
| 2371 | Do *a*† | 8.53 | 2.00 | 18.56 | 3.85 | 63.33 | 3.73 | 2.2 | 20.3 | 4.2 | 69.2 | 4.1 | do | 2371 |
| 2372 | Variety unknown *a*† | 8.42 | 2.13 | 17.63 | 5.08 | 61.46 | 5.28 | 2.3 | 19.2 | 5.5 | 67.2 | 5.8 | do | 2372 |
| 2373 | Do *a*† | 10.29 | 1.54 | 17.63 | 3.20 | 63.85 | 3.49 | 1.7 | 19.6 | 3.5 | 71.3 | 3.9 | do | 2373 |
| 2374 | Scotch Fife † | 9.92 | 1.72 | 16.56 | 3.09 | 64.97 | 3.74 | 1.9 | 18.4 | 3.4 | 72.2 | 4.1 | do | 2374 |
| 2375 | Do *a*† | 8.91 | 1.80 | 17.38 | 3.98 | 64.32 | 3.81 | 2.0 | 19.0 | 4.3 | 70.6 | 4.1 | do | 2375 |
| 2376 | Do *a*† | 8.94 | 1.64 | 16.81 | 2.61 | 68.85 | 3.15 | 1.8 | 18.5 | 2.8 | 73.3 | 3.6 | do | 2376 |
| 2377 | Mammoth Spring *a*† | 11.22 | 1.82 | 14.25 | 2.05 | 65.63 | 3.03 | 2.0 | 16.1 | 2.3 | 76.2 | 3.4 | do | 2377 |
| 2378 | Blue Stem † | 8.79 | 1.62 | 14.75 | 4.67 | 67.35 | 2.82 | 1.8 | 16.1 | 5.2 | 73.8 | 3.1 | do | 2378 |
| 2379 | Saskatchewan Fife † | 9.00 | 1.89 | 14.56 | 2.16 | 69.46 | 2.93 | 2.1 | 16.0 | 2.3 | 76.4 | 3.2 | do | 2379 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Rice: | | | | | | | | | | | | | |
| 2380 | Carolina Golden Seed | 12.93 | 0.38 | 8.55 | 0.17 | 77.70 | 0.27 | 0.4 | 9.8 | 0.2 | 89.3 | 0.3 | U. S. Dept. Agr. Rep., 1879, p. 102 | 2380 |
| 2381 | Carolina White Seed | 13.31 | 0.34 | 8.31 | 0.13 | 77.61 | 0.30 | 0.4 | 9.6 | 0.2 | 89.4 | 0.4 | do | 2381 |
| 2382 | Japan, fully cleaned | 13.09 | 0.43 | 5.86 | 0.11 | 80.23 | 0.28 | 0.5 | 6.8 | 0.1 | 92.3 | 0.3 | do | 2382 |
| 2383 | Japan | 14.02 | 0.42 | 7.44 | 0.17 | 77.53 | 0.42 | 0.5 | 8.7 | 0.2 | 90.1 | 0.5 | do | 2383 |
| 2384 | Patna, Bengal | 12.85 | 0.35 | 7.70 | 0.14 | 78.64 | 0.32 | 0.4 | 8.8 | 0.2 | 90.2 | 0.4 | do | 2384 |
| 2385 | Rangoon | 11.45 | 0.34 | 7.35 | 0.19 | 80.28 | 0.39 | 0.4 | 8.3 | 0.2 | 90.7 | 0.4 | do | 2385 |
| 2386 | Bassein, F. India | 11.38 | 0.48 | 8.40 | 0.19 | 78.93 | 0.62 | 0.5 | 9.5 | 0.2 | 89.1 | 0.7 | do | 2386 |
| 2387 | White seed, grown in Louisiana | 12.16 | 0.33 | 6.65 | 0.19 | 80.40 | 0.27 | 0.4 | 7.6 | 0.2 | 91.5 | 0.3 | do | 2387 |
| 2388 | Honduras, grown in Louisiana | 11.80 | 0.34 | 7.26 | 0.19 | 80.11 | 0.30 | 0.4 | 8.2 | 0.2 | 90.9 | 0.3 | do | 2388 |
| 2389 | Volunteer, grown in Louisiana | 11.45 | 0.40 | 6.83 | 0.40 | 80.55 | 0.37 | 0.5 | 7.7 | 0.5 | 90.9 | 0.4 | do | 2389 |
| | Maximum | 14.02 | 0.48 | 8.55 | 0.40 | 80.55 | 0.62 | 0.5 | 9.8 | 0.5 | 91.5 | 0.7 | | |
| | Minimum | 11.38 | 0.33 | 5.86 | 0.11 | 77.53 | 0.27 | 0.4 | 6.8 | 0.1 | 89.1 | 0.3 | | |
| | Average | **12.44** | **0.38** | **7.44** | **0.19** | **79.20** | **0.35** | **0.4** | **8.5** | **0.2** | **90.5** | **0.4** | | |
| 2390 | Rough *a* | 10.95 | 5.45 | 7.44 | 9.28 | 64.30 | 2.58 | 6.1 | 8.2 | 10.4 | 72.4 | 2.9 | La. Ex. Sta. Bul. 24, 1889, p. 389 | 2390 |
| 2391 | From the stores *a* | 12.12 | 2.55 | 8.09 | 3.03 | 72.11 | 2.10 | 2.9 | 9.2 | 3.5 | 82.0 | 2.4 | do | 2391 |
| 2392 | From the cooling floor *a* | 12.75 | 0.82 | 7.74 | 0.72 | 76.92 | 1.05 | 0.9 | 8.9 | 0.8 | 88.2 | 1.2 | do | 2392 |
| 2393 | Clean *a* | 12.85 | 0.73 | 7.53 | 0.47 | 78.05 | 0.38 | 0.8 | 8.6 | 0.5 | 89.7 | 0.4 | do | 2393 |
| 2394 | Pounded *a* | 12.42 | 2.38 | 8.14 | 2.55 | 72.01 | 2.50 | 2.7 | 9.3 | 2.9 | 82.2 | 2.9 | do | 2394 |
| 2395 | Hungarian grass seed *b* | 9.51 | 4.96 | 9.94 | 7.65 | 63.22 | 4.72 | 5.5 | 11.0 | 8.4 | 69.9 | 5.2 | N. J. Ex. Sta. Rep., 1886, p. 164 | 2395 |
| | Buckwheat: | | | | | | | | | | | | | |
| 2396 | Silver Hull, crop of 1879, grown in Connecticut. | 14.82 | 2.10 | 8.58 | 7.77 | 64.50 | 2.23 | 2.5 | 10.1 | 9.1 | 75.7 | 2.6 | U. S. Census, 1880, vol. III, p. 423 | 2396 |
| 2397 | Common Gray, crop of 1879, grown in Connecticut. | 13.63 | 2.34 | 8.75 | 8.39 | 64.70 | 2.19 | 2.7 | 10.1 | 9.7 | 75.0 | 2.5 | do | 2397 |
| 2398 | Silver Hull, crop of 1879, grown in Massachusetts. | 12.78 | 1.57 | 10.06 | 8.80 | 64.58 | 2.21 | 1.8 | 11.5 | 10.1 | 74.0 | 2.6 | do | 2398 |
| 2399 | Silver Hull, crop of 1879, grown in Minnesota. | 11.47 | 1.83 | 11.00 | 8.02 | 65.37 | 2.31 | 2.1 | 12.4 | 9.1 | 73.8 | 2.6 | do | 2399 |
| 2400 | Common Gray, crop of 1879, grown in New Hampshire. | 11.38 | 2.04 | 10.18 | 9.37 | 64.88 | 2.15 | 2.3 | 11.5 | 10.6 | 73.2 | 2.4 | do | 2400 |
| 2401 | Common, crop of 1879, grown in New Jersey | 12.50 | 2.25 | 10.41 | 9.00 | 63.63 | 2.21 | 2.6 | 11.9 | 10.3 | 72.7 | 2.5 | do | 2401 |
| 2402 | Do | 13.50 | 2.07 | 10.71 | 8.88 | 62.63 | 2.21 | 2.4 | 12.4 | 10.3 | 72.3 | 2.6 | do | 2402 |
| 2403 | Silver Gray, crop of 1879, grown in New York | 10.89 | 1.99 | 10.50 | 9.11 | 65.12 | 2.39 | 2.2 | 11.8 | 10.2 | 73.1 | 2.7 | do | 2403 |
| 2404 | Variety unknown *b* | 10.77 | 2.28 | 10.13 | | 74.37 | 2.45 | 2.6 | 11.5 | | 83.1 | 2.8 | N. J. Ex. Sta. Rep., 1885, p. 168 | 2404 |
| | All complete analyses.. Maximum | 14.82 | 2.34 | 11.00 | 9.37 | 65.37 | 2.39 | 2.7 | 12.4 | 10.6 | 75.7 | 2.7 | | |
| | All complete analyses.. Minimum | 10.89 | 1.57 | 8.58 | 7.77 | 62.63 | 2.15 | 1.8 | 10.1 | 9.1 | 72.3 | 2.4 | | |
| | All complete analyses.. Average | **12.62** | **2.02** | **10.02** | **8.67** | **64.43** | **2.24** | **2.3** | **11.5** | **9.9** | **73.7** | **2.6** | | |
| | Soja bean (*Soja hispida*): | | | | | | | | | | | | | |
| 2405 | Variety unknown | 9.64 | 4.83 | 35.39 | 4.96 | 26.17 | 19.01 | 5.3 | 39.1 | 5.5 | 49.1 | 21.0 | N. J. Ex. Sta. Rep., 1881, p. 53 | 2405 |
| 2406 | Yellow | 10.13 | 3.07 | 34.63 | 3.69 | 30.50 | 17.98 | 3.4 | 38.5 | 4.1 | 34.0 | 20.0 | N. C. Ex. Sta. Rep., 1882, p. 120 | 2406 |
| 2407 | Variety unknown | 6.05 | 5.25 | 38.62 | 4.03 | 29.24 | 16.80 | 5.5 | 41.0 | 4.3 | 31.3 | 17.9 | Cornell Univ. Ex. Sta. Rep., 1883, p. 22 | 2407 |
| 2408 | Do | 8.06 | 4.70 | 40.22 | 7.81 | 26.94 | 12.27 | 5.1 | 43.8 | 8.5 | 29.2 | 13.4 | N. Y. State Ex. Sta. Rep., 1886, p. 365 | 2408 |

*Graded, gluten determinations in *loc. cit.*

†Ungraded, gluten determinations in *loc. cit.*

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | GRAIN AND OTHER SEEDS—Continued. | | | | | | | | | | | | | |
| | Soja bean (*Soja hispida*)—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 2409 | Variety unknown *a* | 10.00 | 4.72 | 35.25 | 2.45 | 30.69 | 16.89 | 5.2 | 39.1 | 2.7 | 34.2 | 18.8 | S. C. Ex. Sta. Rep., 1888, p. 135 | 2409 |
| 2410 | White *c* | 17.38 | 4.31 | 27.56 | 4.42 | 28.24 | 18.09 | 5.2 | 33.4 | 5.3 | 34.2 | 21.9 | Mass. State Ex. Sta. Rep., 1889, p 140 | 2410 |
| 2411 | Do | 5.85 | 5.24 | 33.88 | 4.85 | 32.84 | 17.34 | 5.6 | 36.0 | 5.2 | 34.8 | 18.4 | do | 2411 |
| 2412 | Black *c* | 19.27 | 5.40 | 26.25 | 6.13 | 26.57 | 16.38 | 6.7 | 32.5 | 7.6 | 32.9 | 20.3 | Mass. State Ex. Sta. Rep., 1889, p. 141 | 2412 |
| | Maximum | 19.27 | 5.40 | 40.22 | 6.13 | 32.84 | 19.01 | 6.7 | 43.8 | 8.5 | 49.1 | 21.9 | | |
| | Minimum | 5.85 | 3.07 | 26.25 | 2.45 | 26.17 | 12.27 | 3.4 | 32.5 | 2.7 | 29.2 | 13.4 | | |
| | Average | **10.80** | **4.69** | **33.98** | **4.79** | **28.89** | **16.85** | **5.3** | **38.1** | **5.4** | **32.2** | **19.0** | | |
| | Cowpea: | | | | | | | | | | | | | |
| 2413 | Black | 20.85 | 2.94 | 20.08 | 4.34 | 50.51 | 1.28 | 3.7 | 25.4 | 5.5 | 63.8 | 1.6 | N. C. Ex. Sta. Rep., 1879, p. 112 | 2413 |
| 2414 | Yellow | 19.20 | 3.31 | 23.02 | 5.03 | 48.07 | 1.37 | 4.1 | 28.5 | 6.2 | 59.5 | 1.7 | do | 2414 |
| 2415 | Variety unknown | 11.76 | 3.16 | 19.31 | 3.49 | 60.81 | 1.47 | 3.5 | 21.8 | 4.0 | 69.0 | 1.7 | N. J. Ex. Sta. Rep., 1881, p. 53 | 2415 |
| 2416 | Black-eyed | 12.22 | 3.32 | 21.59 | 4.07 | 57.25 | 1.55 | 3.6 | 24.5 | 4.7 | 65.4 | 1.8 | do | 2416 |
| 2417 | Variety unknown *b* | 10.01 | 3.35 | 19.75 | 3.37 | 61.99 | 1.53 | 3.8 | 21.9 | 3.8 | 68.8 | 1.7 | N. J. Ex. Sta. Rep., 1882, p. 71 | 2417 |
| | Maximum | 20.85 | 3.35 | 23.02 | 5.03 | 61.99 | 1.55 | 4.1 | 28.5 | 6.2 | 69.0 | 1.8 | | |
| | Minimum | 10.01 | 2.94 | 19.31 | 3.37 | 50.51 | 1.28 | 3.6 | 21.8 | 3.8 | 59.5 | 1.6 | | |
| | Average | **14.81** | **3.22** | **20.75** | **4.06** | **55.72** | **1.44** | **3.8** | **24.3** | **4.7** | **65.5** | **1.7** | | |
| 2418 | Beans, white field beans | 15.00 | 3.10 | 20.37 | 3.20 | 56.71 | 1.62 | 3.6 | 23.9 | 3.8 | 66.8 | 1.9 | Conn. State Ex. Sta. Rep., 1887, p. 105 | 2418 |
| 2419 | Sword bean | 10.37 | 2.68 | 26.60 | 4.13 | 53.10 | 3.12 | 3.0 | 29.6 | 4.6 | 59.3 | 3.5 | U. S. Dept. Agr. Rep., 1879, p. 10 | 2419 |
| 2420 | Navy or pea bean | 12.39 | 3.71 | 22.17 | 7.21 | 53.14 | 1.38 | 4.2 | 25.3 | 8.2 | 66.7 | 1.6 | N. Y. State Ex. Sta. Rep., 1885, p. 304 | 2420 |
| 2421 | Linseed | 6.25 | 4.63 | 25.50 | 10.34 | 15.37 | 37.92 | 4.9 | 27.3 | 11.0 | 16.4 | 40.4 | Mo. Agr. Col. Farm Bul. 27, 1887, p. 6 | 2421 |
| 2422 | Linseed, grown in Canada | 8.30 | 3.46 | 20.47 | 4.87 | 30.80 | 32.10 | 3.8 | 22.3 | 5.3 | 33.7 | 34.9 | Ontario Agr. Col. Bul. 34, 1888 | 2422 |
| 2423 | Peanuts, hulls removed* | 10.88 | 3.80 | 31.52 | 3.13 | 12.22 | 3.80 | ..... | ..... | ..... | ..... | ..... | Ala. Farm Jour., 1880, p. 333 | 2423 |
| | MILL PRODUCTS. | | | | | | | | | | | | | |
| | MILL PRODUCTS FROM CORN (MAIZE). | | | | | | | | | | | | | |
| | Corn (maize) meal: | | | | | | | | | | | | | |
| 2424 | Not described | 12.91 | 1.17 | 8.69 | 1.79 | 71.93 | 3.51 | 1.3 | 10.0 | 2.1 | 82.6 | 4.0 | Conn. State Ex. Sta. Rep., 1877, p. 56 | 2424 |
| 2425 | From home-ground yellow flint | 20.67 | 1.17 | 7.81 | 0.93 | 66.35 | 3.07 | 1.5 | 9.8 | 1.2 | 83.6 | 3.9 | do | 2425 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2426 | From Western corn | 21.67 | 1.16 | 7.38 | 1.41 | 65.88 | 2.50 | 1.5 | 9.4 | 1.8 | 84.1 | 3.2 | ....do | 2426 |
| 2427 | From old Western corn | 14.56 | 1.22 | 9.12 | 2.16 | 68.89 | 4.05 | 1.4 | 10.7 | 2.5 | 80.7 | 4.7 | Conn. State Ex. Sta. Rep., 1880, p. 81 | 2427 |
| 2428 | From New York corn | 15.32 | 1.47 | 8.63 | 1.83 | 68.77 | 3.98 | 1.7 | 10.2 | 2.2 | 81.2 | 4.7 | ....do | 2428 |
| 2429 | Not described | 13.87 | 1.33 | 7.88 | 1.60 | 71.92 | 3.40 | 1.5 | 9.2 | 1.9 | 83.4 | 4.0 | N. J. Ex. Sta. Rep., 1880, p. 46 | 2429 |
| 2430 | Do | 12.79 | 1.40 | 7.81 | 1.57 | 72.70 | 3.73 | 1.6 | 9.0 | 1.8 | 83.3 | 4.3 | N. J. Ex. Sta. Rep., 1880, p. 47 | 2430 |
| 2431 | Do | 11.99 | 1.93 | 8.50 | 2.38 | 71.13 | 4.07 | 2.1 | 9.8 | 2.7 | 80.8 | 4.6 | N. J. Ex. Sta. Rep., 1881, p. 53 | 2431 |
| 2432 | Do | 9.86 | 1.92 | 10.85 | 2.38 | 70.36 | 4.63 | 2.1 | 12.1 | 2.6 | 78.1 | 5.1 | U. S. Dept. Agr. Rep., 1881–'82, p. 553 | 2432 |
| 2433 | Do | 12.75 | 1.48 | 8.35 | 1.60 | 71.76 | 4.06 | 1.7 | 9.4 | 1.8 | 82.5 | 4.6 | N. J. Ex. Sta. Rep., 1882, p. 71 | 2433 |
| 2434 | Do. *b* | 11.99 | 3.46 | 8.59 | 2.03 | 69.82 | 4.11 | 4.0 | 9.8 | 2.3 | 79.2 | 4.7 | ....do | 2434 |
| 2435 | Do | 14.60 | 1.60 | 9.20 | 1.90 | 69.10 | 3.60 | 1.9 | 10.8 | 2.2 | 80.9 | 4.2 | Maine Agr., 1882, p. 302 | 2435 |
| 2436 | Do | 13.24 | 1.40 | 10.09 | 1.71 | 69.05 | 4.51 | 1.6 | 11.6 | 2.0 | 79.6 | 5.2 | Cornell Univ. Ex. Sta. Rep., 1883, p. 41 | 2436 |
| 2437 | Do | 18.81 | 1.30 | 8.81 | 1.35 | 67.37 | 2.36 | 1.6 | 10.9 | 1.6 | 83.0 | 2.9 | Conn. State Ex. Sta. Rep., 1883, p. 84 | 2437 |
| 2438 | Do | 17.04 | 1.31 | 13.94 | 2.98 | 60.73 | 4.00 | 1.6 | 16.8 | 3.6 | 73.2 | 4.8 | Mass. State Ex. Sta. Rep., 1883, p. 65 | 2438 |
| 2439 | Do | 13.55 | 1.23 | 9.00 | 2.28 | 70.27 | 3.67 | 1.4 | 10.4 | 2.6 | 81.4 | 4.2 | Mass. State Ex. Sta. Rep., 1883, p. 66 | 2439 |
| 2440 | Do | 19.98 | 1.18 | 8.65 | 0.50 | 65.35 | 4.34 | 1.5 | 10.8 | 0.6 | 81.7 | 5.4 | N. Y. Ex. Sta. Rep., 1883, p. 151 | 2440 |
| 2441 | From whole kernels | 12.84 | 1.15 | 7.52 | 0.98 | 73.88 | 3.63 | 1.3 | 8.6 | 1.1 | 84.8 | 4.2 | ....do | 2441 |
| 2442 | From flinty portion of kernel, same corn as the preceding. | 13.05 | 1.09 | 7.66 | 0.96 | 73.43 | 3.81 | 1.2 | 8.8 | 1.1 | 84.5 | 4.4 | ....do | 2442 |
| 2443 | From that portion of the kernel containing and surrounding the germ, same corn as the two preceding. | 12.53 | 1.26 | 7.11 | 1.68 | 73.96 | 3.46 | 1.4 | 8.1 | 1.9 | 84.6 | 4.0 | ....do | 2443 |
| 2444 | Not described | 11.95 | 1.40 | 11.56 | 2.28 | 68.91 | 3.90 | 1.6 | 13.1 | 2.6 | 78.3 | 4.4 | Mass. State Ex. Sta. Rep., 1884, p. 111 | 2444 |
| 2445 | Do | 12.40 | 1.45 | 9.44 | 2.37 | 70.71 | 3.63 | 1.7 | 10.8 | 2.7 | 80.7 | 4.1 | ....do | 2445 |
| 2446 | Do | 13.85 | 1.23 | 8.95 | 2.28 | 70.03 | 3.66 | 1.4 | 10.4 | 2.6 | 81.4 | 4.2 | Mass. State Ex. Sta. Rep., 1884, p. 41 | 2446 |
| 2447 | Do. *b* | 15.75 | 1.35 | 8.76 | 1.70 | 68.54 | 3.90 | 1.7 | 10.4 | 2.0 | 81.3 | 4.6 | N. J. Ex. Sta. Rep., 1884, p. 107 | 2447 |
| 2448 | Do. *b* | 16.60 | 1.55 | 8.44 | 1.91 | 67.58 | 3.92 | 1.9 | 10.1 | 2.3 | 81.0 | 4.7 | ....do | 2448 |
| 2449 | Do | 16.17 | 1.45 | 8.60 | 1.81 | 68.06 | 3.91 | 1.7 | 10.2 | 2.1 | 81.3 | 4.7 | N. J. Ex. Sta. Rep., 1884, p. 116 | 2449 |
| 2450 | Do | 20.30 | 1.17 | 9.06 | 1.41 | 65.83 | 2.23 | 1.5 | 11.4 | 1.8 | 82.5 | 2.8 | N. Y. Ex. Sta. Rep., 1884, p. 332 | 2450 |
| 2451 | Do | 24.54 | 1.18 | 8.20 | 1.52 | 60.60 | 3.96 | 1.5 | 10.9 | 2.0 | 80.4 | 5.2 | ....do | 2451 |
| 2452 | Do | 21.00 | 1.29 | 9.02 | 1.74 | 64.62 | 2.33 | 1.6 | 11.4 | 2.2 | 81.8 | 3.0 | ....do | 2452 |
| 2453 | Pure corn meal *b* | 11.75 | 1.40 | 9.00 | | 73.32 | 4.53 | 1.6 | 10.2 | | 83.1 | 5.1 | N. J. Ex. Sta. Rep., 1885, p. 164 | 2453 |
| 2454 | Not described | 13.51 | 1.40 | 9.06 | | 72.41 | 3.62 | 1.6 | 10.5 | | 83.7 | 4.2 | ....do | 2454 |
| 2455 | Do. *b* | 13.01 | 1.42 | 8.75 | | 72.93 | 3.89 | 1.6 | 10.1 | | 83.8 | 4.5 | ....do | 2455 |
| 2456 | Do. *b* | 13.57 | 1.36 | 9.38 | | 71.14 | 4.55 | 1.6 | 10.8 | | 82.3 | 5.3 | ....do | 2456 |
| 2457 | White dent corn meal *b* | 12.97 | 1.45 | 9.44 | | 71.79 | 4.35 | 1.6 | 10.8 | | 82.5 | 5.1 | ....do | 2457 |
| 2458 | From 8-rowed yellow corn *b* | 12.52 | 1.30 | 9.37 | | 73.06 | 3.75 | 1.5 | 10.7 | | 83.5 | 4.3 | ....do | 2458 |
| 2459 | Yellow flint corn meal *b* | 12.36 | 1.30 | 9.13 | | 72.92 | 4.29 | 1.5 | 10.5 | | 83.1 | 4.9 | ....do | 2459 |
| 2460 | Do. *b* | 9.58 | 1.70 | 10.44 | | 73.46 | 4.82 | 1.9 | 11.5 | | 81.3 | 5.3 | ....do | 2460 |
| 2461 | Do. *b* | 13.05 | 1.47 | 9.56 | | 71.17 | 4.75 | 1.7 | 11.0 | | 81.8 | 5.5 | ....do | 2461 |
| 2462 | White flint corn meal *b* | 10.29 | 1.21 | 8.88 | | 76.53 | 3.09 | 1.3 | 9.9 | | 85.4 | 3.4 | ....do | 2462 |
| 2463 | Yellow dent corn meal *b* | 13.11 | 1.12 | 8.75 | | 72.37 | 4.65 | 1.3 | 10.1 | | 83.2 | 5.4 | ....do | 2463 |
| 2464 | Do. *b* | 13.93 | 1.36 | 8.56 | | 72.97 | 3.18 | 1.6 | 10.0 | | 84.7 | 3.7 | ....do | 2464 |
| 2465 | Western corn meal, coarse *b* | 12.79 | 1.49 | 8.31 | | 73.46 | 3.95 | 1.7 | 10.1 | | 83.6 | 4.6 | ....do | 2465 |
| 2466 | Do. *b* | 11.79 | 1.53 | 9.56 | | 73.01 | 4.11 | 1.7 | 10.8 | | 82.9 | 4.6 | ....do | 2466 |
| 2467 | Do. *b* | 12.04 | 1.58 | 8.94 | | 73.44 | 4.00 | 1.8 | 10.2 | | 83.5 | 4.5 | ....do | 2467 |
| 2468 | Corn meal, old and new mixed *b* | 16.95 | 1.41 | 8.50 | | 69.42 | 3.72 | 1.7 | 10.2 | | 83.6 | 4.5 | ....do | 2468 |
| 2469 | Do. *b* | 14.93 | 1.46 | 9.44 | | 69.95 | 4.22 | 1.7 | 11.1 | | 82.3 | 4.9 | ....do | 2469 |
| 2470 | New feed, Indian *b* | 20.90 | 1.37 | 8.38 | | 67.39 | 1.96 | 1.7 | 10.6 | | 85.2 | 2.5 | ....do | 2470 |

* Adds 65.35

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | MILL PRODUCTS—Continued. | | | | | | | | | | | | | |
| | MILL PRODUCTS FROM CORN (MAIZE)—continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 2471 | Corn (maize) meal | 12.62 | 1.36 | 9.99 | 2.31 | 69.98 | 3.74 | 1.6 | 11.4 | 2.6 | 80.1 | 4.3 | Mass. State Ex. Sta. Rep., 1885, p.21.. | 2471 |
| 2472 | Do | 15.80 | 1.05 | 10.31 | 1.58 | 67.64 | 3.62 | 1.2 | 12.3 | 1.9 | 80.3 | 4.3 | N. Y. State Ex. Sta. Rep., 1885, p. 305. | 2472 |
| 2473 | Do | 10.25 | 1.36 | 9.08 | 1.18 | 73.55 | 4.58 | 1.5 | 10.1 | 1.3 | 82.0 | 5.1 | ....do | 2473 |
| 2474 | Do | 12.88 | 1.38 | 9.90 | 2.81 | 68.87 | 4.16 | 1.6 | 11.4 | 3.2 | 79.0 | 4.8 | ....do | 2474 |
| 2475 | Do | 12.21 | 1.40 | 10.86 | 2.24 | 68.23 | 5.06 | 1.6 | 12.4 | 2.5 | 77.7 | 5.8 | ....do | 2475 |
| 2476 | Do | 8.01 | 1.38 | 9.55 | 2.14 | 73.95 | 4.97 | 1.5 | 10.4 | 2.3 | 80.4 | 5.4 | ....do | 2476 |
| 2477 | Do | 12.04 | 1.38 | 10.19 | 1.88 | 70.14 | 4.37 | 1.6 | 11.6 | 2.1 | 79.7 | 5.0 | Conn. State Ex. Sta. Rep., 1885, p. 40. | 2477 |
| 2478 | Do | 13.12 | 1.42 | 10.00 | 1.75 | 69.21 | 4.50 | 1.6 | 11.5 | 2.0 | 79.7 | 5.2 | ....do | 2478 |
| 2479 | Do | 13.29 | 1.43 | 9.81 | 2.71 | 68.20 | 4.56 | 1.6 | 11.3 | 3.1 | 78.7 | 5.3 | ....do | 2479 |
| 2480 | Do | 14.24 | 1.55 | 9.50 | 1.28 | 70.80 | 2.63 | 1.8 | 11.1 | 1.5 | 82.5 | 3.1 | ....do | 2480 |
| 2481 | Do | 18.75 | 4.05 | 8.70 | 2.40 | 61.82 | 4.28 | 5.0 | 10.5 | 3.0 | 76.2 | 5.3 | Wis. Ex. Sta. Rep., 1886, p. 99 | 2481 |
| 2482 | From dent corn | 18.00 | 1.40 | 10.00 | 2.10 | 64.42 | 4.08 | 1.7 | 12.2 | 2.5 | 78.6 | 5.0 | Me. Ex. Sta. Rep., 1885–'86, p. 51 | 2482 |
| 2483 | Do | 20.95 | 1.50 | 9.44 | 2.14 | 61.72 | 4.25 | 1.9 | 11.9 | 2.7 | 78.1 | 5.4 | ....do | 2483 |
| 2484 | From flint corn | 18.25 | 1.45 | 8.25 | 1.86 | 66.03 | 4.16 | 1.7 | 10.1 | 2.2 | 80.9 | 5.1 | ....do | 2484 |
| 2485 | Not described | 25.55 | 0.88 | 7.36 | 2.64 | 60.41 | 3.16 | 1.2 | 9.9 | 3.5 | 81.2 | 4.2 | N. Y. State Ex. Sta. Rep., 1886, p. 365. | 2485 |
| 2486 | Very poor quality | 27.41 | 1.27 | 8.75 | 2.26 | 57.02 | 3.29 | 1.7 | 12.5 | 3.1 | 78.2 | 4.5 | ....do | 2486 |
| 2487 | Not described | 16.96 | 1.39 | 8.56 | 1.98 | 66.92 | 4.19 | 1.7 | 10.3 | 2.4 | 80.6 | 5.0 | ....do | 2487 |
| 2488 | Do | 23.14 | 1.11 | 8.65 | 1.67 | 61.88 | 3.55 | 1.6 | 11.2 | 2.2 | 80.4 | 4.6 | ....do | 2488 |
| 2489 | Heated | 22.56 | 1.71 | 9.83 | 2.42 | 61.53 | 1.95 | 2.2 | 12.7 | 3.1 | 79.5 | 2.5 | ....do | 2489 |
| 2490 | Not described | 12.63 | 1.38 | 8.93 | 2.10 | 70.60 | 4.36 | 1.6 | 10.2 | 2.4 | 80.8 | 5.0 | Mo. Agr. Col. Farm Bul. 27, 1887, p. 6. | 2490 |
| 2491 | Do | 12.62 | 1.36 | 9.99 | 2.32 | 69.98 | 3.73 | 1.5 | 11.4 | 2.7 | 80.1 | 4.3 | Mass. State Ex. Sta. Rep., 1887, p. 85. | 2491 |
| 2492 | Do | 11.95 | 1.41 | 11.53 | 2.29 | 68.95 | 3.87 | 1.6 | 13.1 | 2.6 | 78.3 | 4.4 | Mass. State Ex. Sta. Rep., 1887, p. 52. | 2492 |
| 2493 | Do | 13.08 | 1.45 | 9.03 | 3.03 | 69.19 | 4.22 | 1.6 | 10.4 | 3.5 | 79.5 | 5.0 | ....do | 2493 |
| 2494 | Do | 11.68 | 1.38 | 9.13 | 2.15 | 71.48 | 4.18 | 1.5 | 10.3 | 2.4 | 81.1 | 4.7 | Mass. State Ex. Sta. Rep., 1887, p.105. | 2494 |
| 2495 | Do | 12.98 | 1.52 | 8.76 | 2.98 | 69.34 | 4.42 | 1.7 | 10.1 | 3.4 | 79.7 | 5.1 | ....do | 2495 |
| 2496 | Do | 13.18 | 1.36 | 9.31 | 3.09 | 68.83 | 4.22 | 1.6 | 10.7 | 3.6 | 79.3 | 4.8 | Mass. State Ex. Sta. Rep., 1887, p.106. | 2496 |
| 2497 | From Brazilian flour corn, raised in Connecticut. | 11.86 | 1.82 | 8.51 | 1.89 | 70.98 | 4.94 | 2.1 | 9.7 | 2.1 | 80.5 | 5.6 | Vt. Ex. Sta. Rep., 1887, p. 131 | 2497 |
| 2498 | Not described | 11.97 | 1.30 | 10.46 | 1.61 | 70.42 | 4.24 | 1.5 | 11.9 | 1.8 | 80.0 | 4.8 | Mass. State Ex. Sta. Rep., 1888, p. 87. | 2498 |
| 2499 | Do | 12.78 | 1.38 | 9.73 | 1.48 | 71.17 | 3.46 | 1.6 | 11.0 | 1.7 | 81.7 | 4.0 | Mass. State Ex. Sta. Rep., 1888, p. 49. | 2499 |
| 2500 | Do | 13.59 | 1.45 | 9.00 | 1.35 | 71.93 | 2.68 | 1.7 | 10.4 | 1.5 | 83.3 | 3.1 | Mass. State Ex. Sta. Rep., 1888, p. 82. | 2500 |
| 2501 | Do | 12.07 | 1.25 | 8.42 | 2.05 | 71.74 | 4.47 | 1.4 | 9.6 | 2.4 | 81.5 | 5.1 | Ark. Ex. Sta. Rep., 1888, p. 133 | 2501 |
| 2502 | From yellow dent corn *a* | 12.92 | 1.20 | 9.22 | 2.67 | 70.23 | 3.76 | 1.4 | 10.6 | 3.1 | 80.6 | 4.3 | Wis. Ex. Sta. Rep., 1888, p. 31 | 2502 |
| 2503 | Not described | 11.77 | 1.44 | 10.19 | 2.00 | 72.38 | 2.22 | 1.6 | 11.6 | 2.3 | 82.0 | 2.5 | Vt. Ex. Sta. Rep., 1888, p. 76 | 2503 |
| 2504 | From new corn, analyzed in December | 17.42 | 1.26 | 8.00 | 1.38 | 68.65 | 3.29 | 1.5 | 9.6 | 1.7 | 83.2 | 4.0 | Conn. State Ex. Sta. Rep., 1888, p.150. | 2504 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2505 | From old corn, analyzed in December | 14.61 | 1.18 | 8.87 | 1.35 | 69.96 | 4.03 | 1.4 | 10.3 | 1.6 | 82.0 | 4.7 | do | 2505 |
| 2506 | Not described *a* | 19.08 | 1.12 | 9.51 | 1.47 | 65.12 | 3.70 | 1.4 | 11.8 | 1.8 | 80.4 | 4.6 | N. Y. State Ex. Sta. Rep., 1888, p. 238. | 2506 |
| 2507 | Do | 12.89 | 1.22 | 9.66 | 1.65 | 70.92 | 3.66 | 1.4 | 11.1 | 1.9 | 81.4 | 4.2 | Mass. State Ex. Sta. Rep., 1889, p. 31 | 2507 |
| 2508 | Do | 16.44 | 1.67 | 10.27 | 1.75 | 66.95 | 2.92 | 2.0 | 12.3 | 2.1 | 80.1 | 3.5 | Mass. State Ex. Sta. Rep., 1889, p.125. | 2508 |
| 2509 | Do | 12.13 | 1.31 | 9.14 | 1.58 | 71.98 | 3.86 | 1.5 | 10.4 | 1.8 | 81.9 | 4.4 | do | 2509 |
| 2510 | Do | 10.71 | 0.89 | 9.10 | 1.52 | 74.03 | 3.75 | 1.0 | 10.2 | 1.7 | 82.9 | 4.2 | Mass. State Ex. Sta. Rep., 1889, p.126. | 2510 |
| 2511 | Do | 11.98 | 1.40 | 10.38 | 1.58 | 70.53 | 4.13 | 1.6 | 11.8 | 1.8 | 80.1 | 4.7 | do | 2511 |
| 2512 | Do | 13.36 | 1.13 | 9.35 | 1.99 | 71.40 | 2.77 | 1.3 | 10.8 | 2.3 | 82.4 | 3.2 | Mass. State Ex. Sta. Rep., 1889, p.127. | 2512 |
| 2513 | Do | 15.51 | 1.35 | 9.89 | 1.44 | 68.01 | 3.80 | 1.6 | 11.7 | 1.7 | 80.5 | 4.5 | do | 2513 |
| 2514 | Do | 11.32 | 1.33 | 9.13 | 1.06 | 73.35 | 3.81 | 1,5 | 10.3 | 1.2 | 82.7 | 4.3 | Mass. State Ex. Sta. Rep., 1889, p.128. | 2514 |
| 2515 | Do | 10.05 | 1.44 | 9.90 | 1.17 | 73.66 | 3.78 | 1.6 | 11.0 | 1.3 | 81.9 | 4.2 | do | 2515 |
| 2516 | Do | 13.90 | 1.50 | 10.17 | 1.81 | 68.37 | 4.25 | 1.8 | 11.8 | 2.1 | 79.4 | 4.9 | N. H. Ex. Sta. Bul. 8, 1889, p. 10 | 2516 |
| 2517 | Do. *a d* | 19.96 | 1.28 | 8.32 | 1.84 | 65.96 | 2.64 | 1.6 | 10.4 | 2.3 | 82.4 | 3.3 | Wis. Ex. Sta. Rep., 1889, p. 73 | 2517 |
| 2518 | Do | 15.29 | 2 00 | 8.87 | 2.45 | 68.11 | 3.28 | 2.4 | 10.4 | 3.0 | 80.3 | 3.9 | Miss. Ex. Sta. Bul. 8, 1889, p. 6 | 2518 |
| | All complete analyses—Maximum | 27.41 | 4.05 | 13.94 | 3.09 | 73.96 | 5.06 | 5.0 | 16.8 | 3.6 | 84.8 | 5.8 | | |
| | All complete analyses—Minimum | 8.01 | 0.88 | 7.11 | 0.50 | 60.41 | 1.95 | 1.0 | 8.1 | 0.6 | 73.2 | 2.5 | | |
| | All complete analyses—Average | **14.98** | **1.42** | **9.17** | **1.90** | **68.76** | **3.77** | **1.6** | **10.8** | **2.2** | **81.0** | **4.4** | | |
| | Corn (maize) and cob meal: | | | | | | | | | | | 4.5 | N. J. Ex. Sta. Rep., 1881, p. 53 | 2519 |
| 2519 | Not described | 12.68 | 1.19 | 7.06 | 6.47 | 68.68 | 3.92 | 1.4 | 8.1 | 7.4 | 78.6 | 3.4 | Mass. State Ex. Sta. Rep., 1883, p. 67 | 2520 |
| 2520 | Do | 19.07 | 1.30 | 12.19 | 7.91 | 56.75 | 2.78 | 1.6 | 15.1 | 9.8 | 70.1 | | | |
| | | | | | | | | | | | | 2.5 | N. J. Ex. Sta. Rep., 1885, p. 164 | 2521 |
| 2521 | White flint *b* | 12 95 | 1.48 | 7.63 | 75.75 | | 2.19 | 1.7 | 8.7 | 87.1 | | 3.3 | do | 2522 |
| 2522 | White and yellow corn meal with cob *b* | 11.95 | 1.33 | 6.69 | 77.15 | | 2.88 | 1.5 | 7.6 | 87.6 | | 1.8 | do | 2523 |
| 2523 | New corn *b* | 24.22 | 1.26 | 7 79 | 65.35 | | 1.38 | 1.7 | 10.3 | 86.2 | | 2 5 | do | 2524 |
| 2524 | Not described | 35.15 | 1.27 | 5.50 | 56.34 | | 1.74 | 2.0 | 8.5 | 87.0 | | 4.3 | Me. Ex. Sta. Rep., 1885–'86, p. 51 | 2525 |
| 2525 | Do | 12.60 | 1.90 | 7.81 | 9.35 | 64.55 | 3.79 | 2.2 | 8.9 | 10.7 | 73.9 | 5.2 | Mass. State Ex. Sta. Rep., 1886, p. 41 | 2526 |
| 2526 | Do | 9.45 | 1.49 | 8.92 | 5.72 | 69.72 | 4.70 | 1.6 | 9.9 | 6.3 | 77.0 | 3.4 | Mass. State Ex. Sta. Rep., 1888, p. 85 | 2527 |
| 2527 | Do. *c* | 26.34 | 1.20 | 5.76 | 4.65 | 59.57 | 2.48 | 1.6 | 7.8 | 6.3 | 80.9 | 3.7 | do | 2528 |
| 2528 | Do | 13.69 | 1.45 | 7.88 | 6.69 | 67.12 | 3.17 | 1.7 | 9.1 | 7.8 | 77.7 | ..... | Indiana Ex. Sta. Bul. 24, 1889 | 2529 |
| 2529 | Do | 11.75 | 1 69 | 9.58 | 5.56 | 67.55 | 3.87 | ..... | ..... | ..... | ..... | | | |
| | All complete analyses—Maximum | 26.34 | 1.90 | 12.19 | 9.35 | 69.72 | 4.70 | 2.2 | 15.1 | 10.7 | 80.9 | 5.2 | | |
| | All complete analyses—Minimum | 9.45 | 1.19 | 5.76 | 4.65 | 56.75 | 2.48 | 1.4 | 7.6 | 6.3 | 70.1 | 1.8 | | |
| | All complete analyses—Average | **15.08** | **1.46** | **8.45** | **6.62** | **64.86** | **3.53** | **1.7** | **10.0** | **7.8** | **76.4** | **4.1** | | |
| 2530 | Hominy, from Southern corn | 13.62 | 0.37 | 8.08 | 0.33 | 77.18 | 0.42 | 0.4 | 9.3 | 0.4 | 89.4 | 0.5 | U. S. Census, 1880, vol. III, p. 420 | 2530 |
| 2531 | Hominy | 13.36 | 0.39 | 8.41 | 0.31 | 77.07 | 0.46 | 0.5 | 9.7 | 0.4 | 88.9 | 0.5 | do | 2531 |
| | Cracked corn (maize): | | | | | | | | | | | 4.4 | N. J. Ex. Sta. Rep., 1885, p. 164 | 2532 |
| 2532 | Not described | 12.25 | 1.27 | 8.63 | 73.94 | | 3.91 | 1.5 | 9.8 | 84.3 | | 5.2 | do | 2533 |
| 2533 | New *b* | 18.34 | 1.46 | 8.75 | 67.20 | | 4.25 | 1.8 | 10.7 | 82.3 | | 4.0 | Mass. State Ex. Sta. Rep., 1887, p. 106 | 2534 |
| 2534 | Chits removed | 13.58 | 2.25 | 9.51 | 2.76 | 68.44 | 3.46 | 2.6 | 11.0 | 3.2 | 79.2 | | | |
| | MILL PRODUCTS FROM SORGHUM. | | | | | | | | | | | | | |
| 2535 | Sorghum seed meal, mostly decorticated | 13.16 | 1.59 | 8.25 | 1.88 | 71.27 | 3.85 | 1.8 | 9.4 | 2.2 | 82.1 | 4.5 | N. J. Ex. Sta. Rep., 1882, p. 70 | 2535 |
| 2536 | Broom-corn-seed meal | 13.54 | 2.08 | 9.68 | 6.92 | 64.24 | 3.54 | 2.4 | 11.2 | 8.0 | 74.3 | 4.1 | Mass. State Ex. Sta. Rep., 1887, p. 100 | 2536 |

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | MILL PRODUCTS—Continued. | | | | | | | | | | | | | |
| | MILL PRODUCTS FROM OATS. | % | % | % | % | % | % | % | % | % | % | % | | |
| 2537 | Ground oats | 13.26 | 2.94 | 10.30 | 19.37 | 50.75 | 3.38 | 3.4 | 11.9 | 22.3 | 58.5 | 3.9 | N. Y. State Ex. Sta. Rep., 1885, p. 305. | 2537 |
| 2538 | Do | 10.09 | 3.24 | 11.63 | 16.57 | 53.98 | 4.49 | 3.6 | 12.9 | 18.4 | 60.1 | 5.0 | do | 2538 |
| | **Oatmeal:** | | | | | | | | | | | | | |
| 2539 | From Ireland | 8.84 | 1.81 | 12.87 | 0.66 | 67.05 | 8.77 | 2.0 | 14.1 | 0.7 | 73.6 | 9.6 | U. S. Census, 1880, vol. III, p. 421 | 2539 |
| 2540 | C. Akron, from Ohio | 6.23 | 1.99 | 14.87 | 0.83 | 68.99 | 7.09 | 2.1 | 15.9 | 0.9 | 73.5 | 7.6 | do | 2540 |
| 2541 | Hickory Nut, from New York | 8.22 | 1.98 | 14.19 | 0.79 | 68.22 | 6.60 | 2.2 | 15.5 | 0.8 | 74.3 | 7.2 | do | 2541 |
| 2542 | Silver Medal, from New York | 8.13 | 2.17 | 15.13 | 1.15 | 66.62 | 6.80 | 2.4 | 16.5 | 1.2 | 72.5 | 7.4 | do | 2542 |
| 2543 | Pin Head, from New York | 8.18 | 1.86 | 16.25 | 0.64 | 67.02 | 6.05 | 2.0 | 17.7 | 0.7 | 73.0 | 6.6 | do | 2543 |
| 2544 | Brand unknown, from New York | 7.52 | 2.23 | 14.63 | 1.10 | 67.45 | 7.07 | 2.4 | 15.8 | 1.2 | 72.9 | 7.7 | do | 2544 |
| | Maximum | 8.84 | 2.23 | 16.25 | 1.15 | 68.99 | 8.77 | 2.4 | 17.7 | 1.2 | 74.3 | 9.6 | | |
| | Minimum | 6.23 | 1.81 | 12.87 | 0.64 | 66.62 | 6.05 | 2.0 | 14.1 | 0.7 | 72.5 | 6.6 | | |
| | Average | **7.85** | **2.01** | **14.66** | **0.86** | **67.56** | **7.06** | **2.2** | **15.9** | **1.0** | **73.2** | **7.7** | | |
| | MILL PRODUCTS FROM BARLEY. | | | | | | | | | | | | | |
| 2545 | Barley meal | 9.85 | 3.77 | 12.68 | 7.00 | 63.46 | 3.24 | 4.2 | 14.1 | 7.8 | 70.3 | 3.6 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 27. | 2545 |
| 2546 | Do | 12.19 | 1.58 | 9.83 | 6.51 | 67.96 | 1.93 | 1.8 | 11.2 | 7.4 | 77.4 | 2.2 | Mass. State Ex. Sta. Rep., 1889, p. 139. | 2546 |
| 2547 | Do | 13.61 | 2.42 | 8.99 | 5.87 | 67.64 | 1.47 | 2.8 | 10.4 | 6.8 | 78.3 | 1.7 | do | 2547 |
| | Average | **11.88** | **2.59** | **10.50** | **6.46** | **66.36** | **2.21** | **3.0** | **11.9** | **7.3** | **75.3** | **2.5** | | |
| 2548 | Pearled barley, No. 3 | 11.82 | 0.98 | 8.44 | 0.32 | 77.76 | 0.68 | 1.1 | 9.6 | 0.4 | 88.1 | 0.8 | U. S. Census, 1880, vol. III, p. 422 | 2548 |
| | MILL PRODUCTS FROM RYE. | | | | | | | | | | | | | |
| 2549 | Rye flour, from Massachusetts | 13.56 | 0.77 | 6.63 | 0.40 | 77.78 | 0.86 | 0.9 | 7.7 | 0.4 | 90.0 | 1.0 | U. S. Census, 1880, vol. III, p. 423 | 2549 |
| 2550 | Rye flour, from Connecticut | 12.35 | 0.72 | 6.94 | 0.43 | 78.67 | 0.89 | 0.8 | 7.9 | 0.5 | 89.8 | 1.0 | do | 2550 |
| 2551 | Rye flour | 12.92 | 0.76 | 6.00 | 0.45 | 79.09 | 0.78 | 0.9 | 6.9 | 0.5 | 89.8 | 0.9 | do | 2551 |
| 2552 | Rye flour, from New Jersey | 13.58 | 0.64 | 7.05 | 0.35 | 77.56 | 0.82 | 0.7 | 8.1 | 0.4 | 89.8 | 1.0 | do | 2552 |
| | Average | **13.10** | **0.72** | **6.65** | **0.41** | **78.28** | **0.84** | **0.8** | **7.7** | **0.4** | **90.2** | **0.9** | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2553 | Ground rye *b* | 13.22 | 1.66 | 9.50 | 73.82 | 1.80 | 2.0 | 10.9 | 85.0 | 2.1 | N. J. Ex. Sta. Rep., 1885, p. 170 | 2553 |
| 2554 | Do *b* | 12.77 | 1.84 | 10.50 | 72.89 | 2.00 | 2.1 | 12.0 | 83.6 | 2.3 | do | 2554 |
| 2555 | Clear rye feed *b* | 11.35 | 1.85 | 10.25 | 74.96 | 1.59 | 2.1 | 11.5 | 84.6 | 1.8 | do | 2555 |
| 2556 | Ground rye *b* | 12.61 | 1.99 | 11.69 | 72.08 | 1.63 | 2.3 | 13.3 | 82.6 | 1.8 | do | 2556 |
| 2557 | Do *b* | 13.10 | 1.98 | 10.00 | 73.37 | 1.55 | 2.3 | 11.5 | 84.3 | 1.9 | do | 2557 |
| | Average | **12.61** | **1.86** | **10.39** | **73.43** | **1.71** | **2.2** | **11.8** | **84.1** | **1.9** | | |
| | MILL PRODUCTS FROM WHEAT. | | | | | | | | | | | |
| | Wheat flour, from spring wheat: | | | | | | | | | | | |
| 2558 | New process (raised in Connecticut) | 13.50 | 0.42 | 10.92 | 74.04 | 1.12 | 0.5 | 12.6 | 85.6 | 1.3 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 35. | 2558 |
| 2559 | "Tea wheat flour" (raised in Kansas) | 12.43 | 0.59 | 13.56 | 73.42 | | 0.7 | 15.5 | 83.8 | | Mich. Bd. Agr. Rep., 1877, p. 350 | 2559 |
| 2560 | Grass wheat flour (raised in Kansas) | 11.92 | 0.59 | 13.31 | 74.18 | | 0.7 | 15.1 | 84.2 | | do | 2560 |
| 2561 | Early May flour (raised in Kansas) | 10.70 | 0.57 | 11.37 | 77.36 | | 0.6 | 12.7 | 86.7 | | do | 2561 |
| 2562 | Blue Stem flour (raised in Kansas) | 10.99 | 0.57 | 11.37 | 77.07 | | 0.6 | 12.7 | 86.7 | | do | 2562 |
| 2563 | Mammoth Spring flour (raised in Kansas) | 10.96 | 0.69 | 13.31 | 75.04 | | 0.8 | 15.0 | 84.2 | | do | 2563 |
| 2564 | Patent Process (raised in Michigan) | 10.31 | 0.60 | 10.94 | 78.15 | | 0.7 | 12.2 | 87.1 | | do | 2564 |
| 2565 | Brand unknown (raised in Minnesota) | 11.78 | 0.49 | 12.25 | 75.48 | | 0.6 | 13.9 | 85.5 | | do | 2565 |
| 2566 | Do | 12.80 | 0.55 | 12.50 | 74.15 | | 0.6 | 14.3 | 85.1 | | do | 2566 |
| 2567 | No. 1 Flour (locality not given) | 11.98 | 0.46 | 8.71 | 78.11 | 0.74 | 0.5 | 9.9 | 88.8 | 0.8 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 25. | 2567 |
| 2568 | No. 2 Flour (locality not given) | 12.46 | 0.50 | 8.56 | 77.92 | 0.56 | 0.6 | 9.8 | 89.0 | 0.6 | do | 2568 |
| 2569 | No. 3 Flour (locality not gived) | 10.30 | 0.55 | 9.59 | 78.52 | 1.04 | 0.6 | 10.7 | 87.5 | 1.2 | do | 2569 |
| 2570 | New Process (locality not given) | 12.79 | 0.50 | 12.31 | 0.07 \| 73.14 | 1.19 | 0.6 | 14.1 | 0.1 \| 83.8 | 1.4 | Conn. State Ex. Sta. Rep., 1880, p. 81 | 2570 |
| | All analyses of flour from spring wheat. Maximum | 13.50 | 0.69 | 13.56 | 79.56 | | 0.8 | 15.5 | 89.6 | | | |
| | All analyses of flour from spring wheat. Minimum | 10.30 | 0.42 | 8.56 | 73.42 | | 0.5 | 9.8 | 83.8 | | | |
| | All analyses of flour from spring wheat. Average | **11.76** | **0.54** | **11.44** | **76.26** | | **0.6** | **13.0** | **86.4** | | | |
| | Wheat flour, from winter wheat: | | | | | | | | | | | |
| 2571 | Diehl (raised in Michigan) | 8.28 | 0.62 | 10.94 | 80.16 | | 0.7 | 11.9 | 87.4 | | Mich. Bd. Agr. Rep., 1877, p. 350 | 2571 |
| 2572 | Do | 8.29 | 0.65 | 9.71 | 80.35 | | 0.7 | 10.7 | 88.6 | | do | 2572 |
| 2573 | Soule (raised in Michigan) | 10.65 | 0.62 | 10.00 | 78.73 | | 0.7 | 11.2 | 88.1 | | do | 2573 |
| 2574 | Fultz (raised in Michigan) | 9.69 | 0.66 | 8.94 | 80.71 | | 0.7 | 9.9 | 89.4 | | do | 2574 |
| 2575 | Treadwell (raised in Michigan) | 10.46 | 0.66 | 10.63 | 78.25 | | 0.7 | 11.9 | 87.4 | | do | 2575 |
| 2576 | Buckeye (raised in Michigan) | 10.66 | 0.63 | 9.69 | 79.02 | | 0.7 | 10.9 | 88.4 | | do | 2576 |
| 2577 | Asiatic (raised in Michigan) | 9.66 | 0.64 | 11.00 | 78.70 | | 0.7 | 12.2 | 87.1 | | do | 2577 |
| 2578 | Gold Medal (raised in Michigan) | 9.56 | 0.67 | 9.80 | 79.97 | | 0.7 | 10.8 | 88.5 | | do | 2578 |
| 2579 | Do | 9.66 | 0.64 | 11.01 | 78.69 | | 0.7 | 12.2 | 87.1 | | do | 2579 |
| 2580 | Egyptian Red (raised in Michigan) | 9.71 | 0.66 | 10.75 | 78.88 | | 0.7 | 11.9 | 87.4 | | do | 2580 |
| 2581 | Clawson (raised in Michigan) | 9.93 | 0.69 | 11.25 | 78.19 | | 0.7 | 12.5 | 86.8 | | do | 2581 |
| 2582 | Do | 10.69 | 0.64 | 9.62 | 79.05 | | 0.7 | 10.8 | 88.5 | | do | 2582 |
| 2583 | Weeks (raised in Michigan) | 9.10 | 0.65 | 10.50 | 79.75 | | 0.7 | 11.6 | 87.7 | | do | 2583 |
| 2584 | Powers (raised in Michigan) | 10.15 | 0.48 | 11.59 | 77.78 | | 0.5 | 12.9 | 86.6 | | do | 2584 |
| 2585 | Armstrong (raised in Michigan) | 12.61 | 0.63 | 12.25 | 74.51 | | 0.7 | 14.0 | 85.3 | | do | 2585 |
| 2586 | Tuscan (raised in Michigan) | 13.43 | 0.72 | 10.94 | 74.91 | | 0.8 | 12.6 | 86.6 | | do | 2586 |

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | MILL PRODUCTS—Continued. | | | | | | | | | | | | | |
| | MILL PRODUCTS FROM WHEAT—continued. | | | | | | | | | | | | | |
| | Wheat flour, from winter wheat—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 2587 | Patent Process (raised in Michigan) | 10.31 | 0.60 | 10.94 | | 78.15 | | 0.7 | 12.2 | | 87.1 | | Mich. Bd. Agr. Rep., 1877, p. 350 | 2587 |
| 2588 | Snow Flake (raised in Michigan) | 12.96 | 0.53 | 8.56 | 0.17 | 76.59 | 1.19 | 0.6 | 9.8 | 0.2 | 88.0 | 1.4 | U. S. Census, 1880, vol. III, p. 416 | 2588 |
| | All analyses of flour from winter wheat. Maximum | 13.43 | 0.72 | 12.25 | | 80.71 | | 0.8 | 12.9 | | 89.6 | | | |
| | All analyses of flour from winter wheat. Minimum | 8.28 | 0.48 | 8.56 | | 74.51 | | 0.5 | 9.8 | | 85.3 | | | |
| | All analyses of flour from winter wheat. Average | **10.38** | **0.63** | **10.45** | | **78.54** | | **0.7** | **11.7** | | **87.6** | | | |
| | Wheat flour, unclassified: | | | | | | | | | | | | | |
| 2589 | Early Riser (raised in Illinois) | 12.22 | 0.41 | 9.69 | 0.10 | 76.65 | 0.93 | 0.5 | 11.0 | 0.1 | 87.3 | 1.1 | do | 2589 |
| 2590 | Washburn's Superlative (raised in Minnesota) | 13.17 | 0.43 | 12.13 | 0.08 | 73.15 | 1.04 | 0.5 | 14.0 | 0.1 | 84.2 | 1.2 | do | 2590 |
| 2591 | Do | 12.67 | 0.34 | 12.50 | 0.07 | 73.48 | 0.94 | 0.4 | 14.3 | 0.1 | 84.1 | 1.1 | do | 2591 |
| 2592 | Washburn's (raised in Minnesota) | 13.10 | 0.35 | 11.75 | 0.06 | 73.70 | 1.04 | 0.4 | 13.5 | 0.1 | 84.8 | 1.2 | do | 2592 |
| 2593 | Christian's (raised in Minnesota) | 12.52 | 0.40 | 12.16 | 0.07 | 73.80 | 1.05 | 0.5 | 13.9 | 0.1 | 84.3 | 1.2 | do | 2593 |
| 2594 | Straight (raised in Minnesota) | 12.16 | 0.58 | 13.31 | 0.15 | 72.63 | 1.17 | 0.7 | 15.1 | 0.2 | 82.7 | 1.3 | do | 2594 |
| 2595 | Palisade (raised in Minnesota) | 12.02 | 0.41 | 10.44 | 0.08 | 76.24 | 0.81 | 0.5 | 11.9 | 0.1 | 86.6 | 0.9 | do | 2595 |
| 2596 | Patent (raised in Missouri) | 11.19 | 0.52 | 10.00 | 0.13 | 76.93 | 1.23 | 0.6 | 11.3 | 0.1 | 86.6 | 1.4 | do | 2596 |
| 2597 | Perfection (raised in Missouri) | 11.26 | 0.38 | 11.06 | 0.09 | 76.13 | 1.08 | 0.4 | 12.5 | 0.1 | 85.8 | 1.2 | do | 2597 |
| 2598 | White Silk (raised in Missouri) | 12.05 | 0.45 | 9.69 | 0.11 | 76.61 | 1.09 | 0.5 | 11.0 | 0.1 | 87.2 | 1.2 | do | 2598 |
| 2599 | New Hampton (raised in New Jersey) | 12.80 | 0.69 | 11.56 | 0.22 | 73.43 | 1.30 | 0.8 | 13.3 | 0.2 | 84.2 | 1.5 | do | 2599 |
| 2600 | Queen Bee (raised in New York) | 12.14 | 0.56 | 11.63 | 0.09 | 74.32 | 1.26 | 0.6 | 13.3 | 0.1 | 84.6 | 1.4 | do | 2600 |
| 2601 | Hill's XXXX (raised in New York) | 13.04 | 0.50 | 10.54 | 0.14 | 74.62 | 1.16 | 0.6 | 12.1 | 0.2 | 85.8 | 1.3 | do | 2601 |
| 2602 | Blue Jacket (raised in New York) | 12.60 | 0.52 | 10.45 | 0.14 | 75.09 | 1.20 | 0.6 | 12.0 | 0.1 | 85.9 | 1.4 | do | 2602 |
| 2603 | Straight (raised in New York) | 13.02 | 0.59 | 9.87 | 0.16 | 75.17 | 1.19 | 0.7 | 11.4 | 0.2 | 86.3 | 1.4 | do | 2603 |
| 2604 | "Baking Flour" (raised in Wisconsin) | 12.74 | 0.48 | 11.88 | 0.09 | 73.67 | 1.14 | 0.6 | 13.6 | 0.1 | 84.4 | 1.3 | do | 2604 |
| 2605 | Patent | 12.32 | 0.34 | 10.68 | 0.33 | 75.28 | 1.05 | 0.4 | 12.1 | 0.4 | 85.9 | 1.2 | U. S. Dept. Agr. Bul. 4, p. 40 | 2605 |
| 2606 | Bakers | 11.98 | 0.60 | 13.13 | 1.00 | 71.52 | 1.77 | 0.6 | 15.0 | 1.1 | 81.3 | 2.0 | do | 2606 |
| 2607 | Patent | 13.59 | 0.36 | 10.68 | 0.35 | 73.94 | 1.08 | 0.4 | 12.3 | 0.4 | 85.7 | 1.2 | do | 2607 |
| 2608 | Low-Grade | 12.36 | 0.69 | 9.98 | 0.93 | 75.04 | 1.00 | 0.8 | 11.4 | 1.0 | 85.7 | 1.1 | do | 2608 |
| | All complete analyses of wheat flour. Maximum | 13.59 | 0.72 | 13.56 | 1.00 | 78.52 | 1.77 | 0.8 | 15.1 | 1.1 | 87.3 | 2.0 | | |
| | All complete analyses of wheat flour. Minimum | 8.28 | 0.34 | 8.56 | 0.07 | 71.52 | 0.56 | 0.4 | 11.0 | 0.1 | 81.3 | 0.9 | | |
| | All complete analyses of wheat flour. Average | **12.42** | **0.48** | **10.84** | **0.18** | **74.99** | **1.09** | **0.5** | **12.3** | **0.2** | **85.8** | **1.2** | | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Graham flour: | | | | | | | | | | | | | |
| 2609 | Rochester | 12.06 | 1.97 | 12.44 | 1.83 | 69.80 | 1.90 | 2.2 | 14.2 | 2.1 | 79.3 | 2.2 | U. S. Census, 1880, vol. III, p. 417 | 2609 |
| 2610 | Honeoye | 13.52 | 1.68 | 11.31 | 1.99 | 70.00 | 1.50 | 1.9 | 13.1 | 2.3 | 81.0 | 1.7 | ....do | 2610 |
| 2611 | Kelly's No. 1 | 13.69 | 1.67 | 11.25 | 1.78 | 69.89 | 1.72 | 1.9 | 13.0 | 2.1 | 81.0 | 2.0 | ....do | 2611 |
| | Average | **13.09** | **1.77** | **11.67** | **1.87** | **69.89** | **1.71** | **2.1** | **13.4** | **2.2** | **80.3** | **2.0** | | |
| | Entire wheat flour: | | | | | | | | | | | | | |
| 2612 | WWWW brand | 13.09 | 1.45 | 13.07 | 0.99 | 69.52 | 1.88 | 1.6 | 15.0 | 1.1 | 80.1 | 2.2 | U. S. Census, 1880, vol. III, p. 416 | 2612 |
| 2613 | Do | 12.89 | 1.44 | 14.12 | 1.22 | 68.32 | 2.01 | 1.7 | 16.2 | 1.4 | 78.4 | 2.3 | Conn. State Ex. Sta. Rep., 1880, p. 86 | 2613 |
| | PRODUCTS OF ROLLER MILLING.* | | | | | | | | | | | | | |
| | C. A. Pillsbury & Co., Minneapolis: | | | | | | | | | | | | | |
| 2614 | Wheat as it enters the mill | 9.66 | 1.91 | 14.18 | 1.70 | 69.94 | 2.61 | 2.1 | 15.7 | 1.9 | 77.4 | 2.9 | U. S. Dept. Agr., Div. of Chem. Bul. 4,1884, p. 38. | 2614 |
| 2615 | Wheat prepared for the rolls | 9.07 | 1.79 | 14.35 | 1.68 | 70.37 | 2.74 | 2.0 | 15.8 | 1.9 | 77.3 | 3.0 | ....do | 2615 |
| 2616 | Cockle and screenings | 9.03 | 2.65 | 13.65 | 4.23 | 66.12 | 4.32 | 3.0 | 15.0 | 4.6 | 72.7 | 4.7 | ....do | 2616 |
| 2617 | Scourings removed by cleaners | 9.27 | 3.68 | 11.55 | 1.58 | 70.19 | 3.73 | 4.1 | 12.7 | 1.8 | 77.3 | 4.1 | ....do | 2617 |
| 2618 | First break | 8.23 | 1.73 | 14.18 | 1.62 | 71.56 | 2.68 | 1.9 | 15.5 | 1.7 | 78.0 | 2.9 | ....do | 2618 |
| 2619 | Chop from first break | 12.52 | 0.88 | 12.95 | 1.13 | 70.44 | 2.08 | 1.0 | 14.8 | 1.3 | 80.5 | 2.4 | ....do | 2619 |
| 2620 | Second break | 8.37 | 2.04 | 14.00 | 1.65 | 71.47 | 2.47 | 2.2 | 15.3 | 1.9 | 77.9 | 2.7 | ....do | 2620 |
| 2621 | Chop from second break | 12.78 | 0.57 | 12.60 | 0.55 | 71.82 | 1.68 | 0.7 | 14.4 | 0.6 | 82.4 | 1.9 | ....do | 2621 |
| 2622 | Third break | 9.92 | 2.55 | 15.05 | 2.13 | 65.10 | 5.25 | 2.9 | 16.7 | 2.3 | 72.2 | 5.9 | ....do | 2622 |
| 2623 | Chop from third break | 12.70 | 0.78 | 12.78 | 0.78 | 71.10 | 1.86 | 0.9 | 14.7 | 0.9 | 81.3 | 2.2 | ....do | 2623 |
| 2624 | Fourth break | 8.18 | 3.30 | 15.23 | 3.00 | 66.20 | 4.09 | 3.6 | 16.6 | 3.3 | 72.0 | 4.5 | ....do | 2624 |
| 2625 | Chop from fourth break | 12.35 | 1.47 | 14.18 | 1.23 | 67.90 | 2.87 | 1.7 | 16.2 | 1.4 | 77.4 | 3.3 | ....do | 2625 |
| 2626 | Fifth break | 7.62 | 5.16 | 15.75 | 4.80 | 61.76 | 4.91 | 5.6 | 17.0 | 5.2 | 66.9 | 5.3 | ....do | 2626 |
| 2627 | Chop from fifth break | 11.91 | 1.99 | 15.75 | 1.73 | 64.46 | 4.16 | 2.3 | 17.8 | 1.9 | 73.2 | 4.8 | ....do | 2627 |
| 2628 | Sixth break | 7.66 | 5.68 | 16.28 | 5.60 | 59.42 | 5.34 | 6.2 | 17.6 | 6.1 | 64.4 | 5.7 | ....do | 2628 |
| 2629 | Chops from sixth break | 11.84 | 3.29 | 17.68 | 3.18 | 59.09 | 4.92 | 3.7 | 20.0 | 3.6 | 67.1 | 5.6 | ....do | 2629 |
| 2630 | Bran | 10.91 | 5.59 | 16.28 | 5.98 | 56.21 | 5.03 | 6.3 | 18.3 | 6.7 | 63.1 | 5.6 | ....do | 2630 |
| 2631 | Shorts | 10.94 | 3.41 | 16.80 | 3.90 | 60.28 | 4.67 | 3.8 | 18.8 | 4.4 | 67.7 | 5.3 | ....do | 2631 |
| | Middlings, uncleaned— | | | | | | | | | | | | | |
| 2632 | No. 1 | 12.71 | 1.27 | 13.48 | 1.03 | 68.78 | 2.73 | 1.5 | 15.4 | 1.2 | 78.8 | 3.1 | ....do | 2632 |
| 2633 | No. 2 | 12.18 | 1.04 | 13.30 | 0.83 | 70.49 | 2.16 | 1.2 | 15.1 | 1.0 | 80.3 | 2.4 | ....do | 2633 |
| 2634 | No. 3 | 12.27 | 0.70 | 13.13 | 0.58 | 71.52 | 1.80 | 0.8 | 15.0 | 0.6 | 81.5 | 2.1 | ....do | 2634 |
| 2635 | No. 4 | 12.47 | 0.68 | 13.83 | 0.58 | 70.69 | 1.75 | 0.8 | 15.8 | 0.6 | 80.7 | 2.1 | ....do | 2635 |
| 2636 | No. 5 | 12.34 | 0.61 | 14.53 | 0.53 | 70.24 | 1.75 | 0.7 | 16.5 | 0.6 | 80.2 | 2.0 | ....do | 2636 |
| | Middlings, cleaned— | | | | | | | | | | | | | |
| 2637 | No. 1 | 12.67 | 1.07 | 13.13 | 0.85 | 70.16 | 2.12 | 1.2 | 15.0 | 1.0 | 80.4 | 2.4 | ....do | 2637 |
| 2638 | No. 2 | 9.93 | 0.65 | 12.78 | 0.65 | 74.09 | 1.90 | 0.7 | 14.1 | 0.7 | 82.4 | 2.1 | ....do | 2638 |
| 2639 | No. 3 | 12.36 | 0.59 | 13.13 | 0.55 | 71.67 | 1.70 | 0.7 | 15.0 | 0.6 | 81.8 | 1.9 | ....do | 2639 |
| 2640 | No. 4 | 12.51 | 0.52 | 13.30 | 0.33 | 71.57 | 1.77 | 0.6 | 15.2 | 0.4 | 81.7 | 2.1 | ....do | 2640 |
| 2641 | No. 5 | 12.35 | 0.51 | 14.35 | 0.43 | 70.74 | 1.62 | 0.6 | 16.4 | 0.5 | 80.7 | 1.8 | ....do | 2641 |
| | Middlings, reduction on smooth rolls— | | | | | | | | | | | | | |
| 2642 | First | 12.64 | 0.82 | 12.60 | 0.58 | 70.80 | 2.56 | 1.0 | 14.4 | 0.7 | 81.0 | 2.9 | ....do | 2642 |
| 2643 | Chop from first | 12.74 | 0.72 | 12.25 | 0.58 | 71.72 | 1.99 | 0.8 | 14.0 | 0.7 | 82.2 | 2.3 | ....do | 2643 |
| 2644 | Second | | | | | | | | | | | | ....do | 2644 |
| 2645 | Chop from second | 12.48 | 0.57 | 13.65 | 0.38 | 71.24 | 1.68 | 0.7 | 15.5 | 0.4 | 81.5 | 1.9 | ....do | 2645 |
| 2646 | Third | 12.29 | 0.61 | 12.78 | 0.55 | 71.91 | 1.86 | 0.7 | 14.5 | 0.6 | 82.0 | 2.2 | ....do | 2646 |

* In *loc cit.*, phosphoric acid and moist and dry gluten given on all the samples.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **MILL PRODUCTS—Continued.** | | | | | | | | | | | | | |
| | PRODUCTS OF ROLLER MILLING—continued. | | | | | | | | | | | | | |
| | **C. A. Pillsbury & Co., Minneapolis—Continued** | | | | | | | | | | | | | |
| | Middlings, reduction on smooth rolls—cont'd. | % | % | % | % | % | % | % | % | % | % | % | | |
| 2647 | Chop from third | 12.73 | 0.79 | 12.60 | 0.58 | 71.29 | 2.01 | 0.9 | 14.4 | 0.7 | 81.7 | 2.3 | U. S. Dept. Agr., Div. of Chem. Bul. 4, 1884, p. 38. | 2647 |
| 2648 | Fourth | 11.43 | 0.56 | 12.60 | 0.43 | 73.12 | 1.86 | 0.7 | 14.1 | 0.5 | 82.6 | 2.1 | do | 2648 |
| 2649 | Chop from fourth | 11.72 | 0.50 | 13.13 | 0.33 | 72.56 | 1.76 | 0.6 | 14.8 | 0.4 | 82.2 | 2.0 | do | 2649 |
| 2650 | Fifth | 12.21 | 0.65 | 12.78 | 0.43 | 71.85 | 2.08 | 0.7 | 14.5 | 0.5 | 81.9 | 2.4 | U. S. Dept. Agr., Div. of Chem. Bul. 4, 1884, p. 39. | 2650 |
| 2651 | Chop from fifth | 11.47 | 0.56 | 12.78 | 0.50 | 72.66 | 2.03 | 0.6 | 14.5 | 0.6 | 82.0 | 2.3 | do | 2651 |
| | Flour from reduction of middlings— | | | | | | | | | | | | | |
| 2652 | First | 12.03 | 0.39 | 12.05 | 0.25 | 73.70 | 1.58 | 0.4 | 13.7 | 0.3 | 83.8 | 1.8 | do | 2652 |
| 2653 | Second* | 12.42 | 0.44 | 12.60 | 0.33 | 72.55 | 1.66 | 0.5 | 14.4 | 0.4 | 82.7 | 2.0 | do | 2653 |
| 2654 | Third | 11.54 | 0.38 | 11.20 | 0.28 | 75.24 | 1.38 | 0.4 | 12.6 | 0.3 | 85.1 | 1.6 | do | 2654 |
| 2655 | Fourth | 11.58 | 0.40 | 13.30 | 0.38 | 72.92 | 1.42 | 0.4 | 15.0 | 0.4 | 82.6 | 1.6 | do | 2655 |
| 2656 | Fifth | | | | | | | | | | | | do | 2656 |
| | Tailings from middlings purifiers— | | | | | | | | | | | | | |
| 2657 | No. 1 | 12.33 | 3.30 | 16.10 | 3.25 | 60.06 | 4.96 | 3.8 | 18.3 | 3.8 | 68.4 | 5.7 | do | 2657 |
| 2658 | Nos. 2, 3, and 4 | 11.59 | 3.09 | 14.53 | | | 3.92 | 3.5 | 16.4 | | | 4.4 | do | 2658 |
| 2659 | No. 6 | 12.00 | 0.90 | 14.53 | 1.10 | 69.10 | 2.37 | 1.0 | 16.4 | 1.3 | 78.6 | 2.7 | do | 2659 |
| | Tailings from reductions— | | | | | | | | | | | | | |
| 2660 | First | 11.78 | 3.26 | 16.98 | 2.63 | 60.32 | 5.03 | 3.7 | 19.3 | 2.9 | 68.4 | 5.7 | do | 2660 |
| 2661 | Second | 10.35 | 3.38 | 19.95 | 2.08 | 59.87 | 4.37 | 3.8 | 22.3 | 2.3 | 66.7 | 4.9 | do | 2661 |
| 2662 | Third | 11.72 | 2.35 | 16.63 | 1.66 | 63.27 | 4.37 | 2.7 | 18.8 | 1.9 | 71.6 | 5.0 | do | 2662 |
| 2663 | Fourth | 12.09 | 0.88 | 14.00 | 0.40 | 68.47 | 4.16 | 1.2 | 16.0 | 0.4 | 77.7 | 4.7 | do | 2663 |
| 2664 | Fifth | 12.12 | 2.29 | 16.63 | 1.18 | 63.93 | 3.85 | 2.6 | 18.8 | 1.4 | 72.8 | 4.4 | do | 2664 |
| 2665 | Repurified middlings | 11.72 | 2.11 | 14.88 | 1.63 | 65.99 | 3.67 | 2.4 | 16.9 | 1.8 | 74.6 | 4.3 | do | 2665 |
| | Finished flour— | | | | | | | | | | | | | |
| 2666 | Bakers | 12.18 | 0.62 | 14.88 | 0.33 | 69.99 | 2.00 | 0.7 | 17.0 | 0.4 | 79.5 | 2.4 | do | 2666 |
| 2667 | Patent | 11.48 | 0.39 | 12.95 | 0.18 | 73.55 | 1.45 | 0.4 | 14.7 | 0.2 | 83.0 | 1.7 | do | 2667 |
| 2668 | Low-grade | 12.01 | 1.99 | 17.95 | 0.93 | 63.26 | 3.86 | 2.3 | 20.4 | 1.1 | 71.8 | 4.4 | do | 2668 |
| 2669 | Break flour | 12.48 | 0.58 | 15.40 | 0.23 | 69.44 | 1.87 | 0.7 | 17.5 | 0.3 | 79.3 | 2.2 | do | 2669 |
| 2670 | Stone flour | 12.04 | 0.49 | 12.78 | 0.23 | 72.85 | 1.61 | 0.5 | 14.6 | 0.3 | 82.8 | 1.8 | do | 2670 |
| | Flour from tailings— | | | | | | | | | | | | | |
| 2671 | First | 12.55 | 0.62 | 13.30 | 0.35 | 70.25 | 2.93 | 0.7 | 15.1 | 0.4 | 80.4 | 3.4 | do | 2671 |
| 2672 | Second* | 11.20 | 0.76 | 13.65 | 0.48 | 72.28 | 2.63 | 0.8 | 15.1 | 0.5 | 81.4 | 2.9 | do | 2672 |
| 2673 | Third | 12.50 | 0.85 | 13.13 | 0.53 | 70.20 | 2.79 | 0.9 | 15.0 | 0.6 | 80.3 | 3.2 | do | 2673 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2674 | Cockle chop | 12.45 | 2.79 | 12.78 | 3.48 | 64.01 | 4.34 | 3.2 | 14.6 | 4.1 | 73.1 | 5.0 | do | 2674 |
| 2675 | Cockle bran | 7.71 | 3.46 | 10.50 | 9.03 | 65.46 | 3.84 | 3.8 | 11.3 | 9.8 | 71.0 | 4.1 | do | 2675 |
| 2676 | First germ | 8.69 | 3.42 | 24.13 | 1.23 | 53.28 | 9.35 | 3.7 | 26.4 | 1.3 | 58.4 | 10.2 | do | 2676 |
| 2677 | Second germ | 8.75 | 5.45 | 33.25 | 1.75 | 35.19 | 15.61 | 6.0 | 36.5 | 2.0 | 38.5 | 17.0 | do | 2677 |
| 2678 | Third germ | 7.68 | 4.94 | 32.88 | 1.50 | 39.25 | 13.75 | 5.4 | 35.6 | 1.6 | 42.6 | 14.8 | do | 2678 |
| 2679 | Bran duster flour | 11.78 | 1.17 | 13.65 | 0.50 | 70.20 | 2.70 | 1.4 | 15.4 | 0.6 | 79.5 | 3.1 | do | 2679 |
| | Stone stock— | | | | | | | | | | | | | |
| 2680 | No. 2* | 12.15 | 0.40 | 13.65 | 0.25 | 72.91 | 1.64 | 0.5 | 15.4 | 0.3 | 82.0 | 1.8 | do | 2680 |
| 2681 | No. 3 | 12.01 | 0.55 | 13.13 | 0.43 | 71.76 | 2.12 | 0.6 | 14.9 | 0.5 | 81.6 | 2.4 | do | 2681 |
| | Tailings— | | | | | | | | | | | | | |
| 2682 | From sixth break | 11.64 | 2.29 | 15.75 | 1.95 | 64.31 | 4.06 | 2.6 | 17.8 | 2.3 | 72.7 | 4.6 | do | 2682 |
| 2683 | From first centrifugal reel | 11.42 | 2.15 | 15.23 | 1.20 | 66.56 | 3.44 | 2.5 | 17.0 | 1.4 | 75.3 | 3.8 | do | 2683 |
| 2684 | From second centrifugal reel | 11.07 | 2.85 | 17.33 | 2.20 | 61.82 | 4.73 | 3.3 | 19.5 | 2.5 | 69.4 | 5.3 | do | 2684 |
| 2685 | Tail end of tailings | 11.36 | 3.87 | 15.75 | | | 5.23 | 4.4 | 17.8 | | | 5.9 | do | 2685 |
| 2686 | Dust from No. 1 middlings | 11.03 | 1.83 | 14.35 | 5.20 | 64.86 | 2.73 | 2.0 | 16.1 | 5.9 | 73.0 | 3.0 | do | 2686 |
| 2687 | Dust from dust catcher | 11.53 | 1.17 | 14.00 | 1.65 | 69.01 | 2.64 | 1.4 | 15.8 | 1.9 | 78.0 | 2.9 | do | 2687 |
| | Herr & Cissel, Georgetown, D. C.: | | | | | | | | | | | | | |
| 2688 | Mixed wheat, clean | 9.62 | 1.93 | 12.78 | 1.55 | 71.83 | 2.29 | 2.1 | 14.0 | 1.7 | 79.7 | 2.5 | do | 2688 |
| 2689 | First break | 8.13 | 2.03 | 13.48 | 1.60 | 72.30 | 2.46 | 2.2 | 14.8 | 1.7 | 78.6 | 2.7 | do | 2689 |
| 2690 | Second break | 9.47 | 2.00 | 13.13 | 1.58 | 71.81 | 2.01 | 2.2 | 14.5 | 1.8 | 79.3 | 2.2 | do | 2690 |
| 2691 | Third break | 8.79 | 2.03 | 13.13 | 1.70 | 71.98 | 2.37 | 2.2 | 14.5 | 1.9 | 78.8 | 2.6 | do | 2691 |
| 2692 | Fourth break | 8.91 | 2.39 | 13.65 | 1.75 | 70.97 | 2.33 | 2.6 | 14.9 | 2.0 | 78.0 | 2.5 | U. S. Dept. Agr., Div. of Chem. Bul. 4, 1884, p. 40. | 2692 |
| 2693 | Fifth break | 7.18 | 3.46 | 15.40 | | | | 3.7 | 16.6 | | | | do | 2693 |
| 2694 | Sixth break | 9.38 | 4.76 | 16.10 | | | | 5.3 | 17.7 | | | | do | 2694 |
| 2695 | First middling | 11.96 | 0.49 | 10.68 | 0.35 | 75.30 | 1.22 | 0.5 | 12.1 | 0.4 | 85.6 | 1.4 | do | 2695 |
| 2696 | Second middling | 11.89 | 0.51 | 10.50 | 0.33 | 75.56 | 1.21 | 0.5 | 11.9 | 0.4 | 85.8 | 1.4 | do | 2696 |
| 2697 | Third middling | 10.88 | 0.50 | 11.73 | 0.25 | 75.45 | 1.19 | 0.6 | 13.0 | 0.3 | 84.8 | 1.3 | do | 2697 |
| 2698 | First middling, through smooth rolls | 9.87 | 1.84 | 13.13 | 1.18 | 71.98 | 2.00 | 2.0 | 14.6 | 1.3 | 79.9 | 2.2 | do | 2698 |
| 2699 | Patent flour | 12.98 | 0.32 | 9.98 | 0.20 | 75.60 | 0.92 | 0.4 | 11.6 | 0.2 | 86.7 | 1.1 | do | 2699 |
| 2700 | Bakers' flour | 13.29 | 0.47 | 11.03 | 1.50 | 72.45 | 1.26 | 0.5 | 12.8 | 1.7 | 83.6 | 1.4 | do | 2700 |
| 2701 | Low-grade flour | 12.59 | 1.05 | 14.18 | 0.75 | 69.10 | 2.33 | 1.2 | 16.2 | 0.8 | 79.2 | 2.6 | do | 2701 |
| 2702 | Germ middlings | 11.10 | 2.41 | 14.53 | 1.63 | 66.59 | 3.74 | 2.7 | 16.3 | 1.8 | 75.0 | 4.2 | do | 2702 |
| 2703 | Feed middlings or tailings | 8.53 | 3.75 | 16.45 | 4.10 | 62.21 | 4.96 | 4.0 | 18.0 | 4.5 | 68.0 | 5.5 | do | 2703 |
| 2704 | Bran middlings | 8.24 | 6.89 | 16.45 | 6.13 | 56.77 | 5.52 | 7.5 | 18.0 | 6.6 | 61.9 | 6.0 | do | 2704 |
| | Warder & Barnett, Springfield, Ohio: | | | | | | | | | | | | | |
| 2705 | Wheat | 9.05 | 2.06 | 12.43 | 2.33 | 71.67 | 2.46 | 2.2 | 13.7 | 2.5 | 78.9 | 2.7 | do | 2705 |
| 2706 | Patent flour | 12.32 | 0.34 | 10.68 | 0.33 | 75.28 | 1.05 | 0.4 | 12.1 | 0.4 | 85.9 | 1.2 | do | 2706 |
| 2707 | Bakers' flour | 11.98 | 0.60 | 13.13 | 1.00 | 71.52 | 1.77 | 0.7 | 14.8 | 1.2 | 81.3 | 2.0 | do | 2707 |
| 2708 | Low-grade flour | 12.36 | 0.69 | 9.98 | 0.93 | 75.04 | 1.00 | 0.8 | 11.4 | 1.1 | 85.5 | 1.2 | do | 2708 |
| 2709 | Middlings | 8.49 | 4.28 | 17.50 | 3.15 | 60.64 | 5.94 | 4.7 | 19.1 | 3.7 | 66.0 | 6.5 | do | 2709 |
| 2710 | Bran | 7.74 | 6.99 | 15.40 | | | 4.99 | 7.6 | 16.7 | | | 5.4 | do | 2710 |
| 2711 | Patent flour, second sample | 13.59 | 0.36 | 10.68 | 0.35 | 73.94 | 1.08 | 0.4 | 12.4 | 0.4 | 85.6 | 1.2 | do | 2711 |
| | MILL PRODUCTS FROM RICE. | | | | | | | | | | | | | |
| 2712 | Rice flour | 3.66 | 10.71 | 4.68 | 28.31 | 50.90 | 1.74 | 11.1 | 4.8 | 29.4 | 52.9 | 1.8 | N. C. Ex. Sta. Rep., 1882, p. 91 | 2712 |
| 2713 | Rice meal | 15.11 | 6.03 | 9.25 | 8.12 | 59.88 | 1.61 | 7.1 | 10.9 | 9.6 | 70.5 | 1.9 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 27. | 2713 |

* Adds 101 (fresh or air-dry material).

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | MILL PRODUCTS—Continued. | | | | | | | | | | | | | |
| | MILL PRODUCTS FROM MISCELLANEOUS SEEDS. | | | | | | | | | | | | | |
| | Buckwheat flour: | % | % | % | % | % | % | % | % | % | % | % | | |
| 2714 | From Massachusetts | 14.94 | 0.65 | 4.18 | 0.21 | 79.37 | 0.65 | 0.7 | 4.9 | 0.3 | 93.3 | 0.8 | U. S. Census, 1880, vol. III, p. 423 | 2714 |
| 2715 | From Connecticut | 12.84 | 1.26 | 8.00 | 6.35 | 75.81 | 1.74 | 1.5 | 9.2 | 0.4 | 86.9 | 2.0 | do | 2715 |
| 2716 | Locality unknown | 12.78 | 1.26 | 7.25 | 0.27 | 76.85 | 1.59 | 1.5 | 8.3 | 0.3 | 88.1 | 1.8 | do | 2716 |
| 2717 | Do. *b* | 16.19 | 0.52 | 4.19 | | 78.42 | 0.64 | 0.6 | 5.0 | | 93.7 | 0.7 | N. J. Ex. Sta. Rep., 1885, p. 168 | 2717 |
| 2718 | Do. *b* | 15.82 | 0.51 | 3.88 | | 79.16 | 0.63 | 0.6 | 4.6 | | 94.1 | 0.7 | do | 2718 |
| 2719 | Do | 17.63 | 0.83 | 8.13 | 0.52 | 71.10 | 1.79 | 1.0 | 9.8 | 0.6 | 86.6 | 2.0 | Conn. State Ex. Sta. Rep., 1886, p. 111 | 2719 |
| | Average, all complete analyses | **14.55** | **1.00** | **6.89** | **0.34** | **75.78** | **1.44** | **1.2** | **8.0** | **0.4** | **88.8** | **1.6** | | |
| 2720 | Buckwheat farina | 11.23 | 0.41 | 3.31 | 0.13 | 84.64 | 0.28 | 0.5 | 3.7 | 0.2 | 95.3 | 0.3 | U. S. Census, 1880, vol. III, p. 423 | 2720 |
| 2721 | Buckwheat groats | 10.61 | 0.57 | 4.82 | 0.28 | 83.13 | 0.59 | 0.6 | 5.4 | 0.3 | 93.0 | 0.7 | do | 2721 |
| 2722 | Ground linseed *b* | 8.82 | 3.62 | 25.77 | | 28.24 | 33.57 | 4.0 | 28.2 | | 31.1 | 36.7 | N. J. Ex. Sta. Rep., 1885, p. 172 | 2722 |
| 2723 | Do. *b* | 7.77 | 4.44 | 22.31 | | 33.79 | 31.69 | 4.8 | 24.2 | | 36.7 | 34.3 | do | 2723 |
| 2724 | Do | 8.33 | 3.36 | 22.97 | 9.60 | 25.48 | 30.26 | 3.7 | 25.1 | 10.5 | 27.7 | 33.0 | N. Y. State Ex. Sta. Rep., 1885, p. 306 | 2724 |
| 2725 | Do | 7.89 | 6.08 | 20.31 | 5.01 | 30.21 | 30.50 | 6.6 | 22.0 | 5.4 | 33.0 | 33.0 | Ontario Agr. Col. Bul. 34, 1888 | 2725 |
| | Average, Nos. 2724 and 2725 | **8.11** | **4.72** | **21.64** | **7.30** | **27.85** | **30.38** | **5.1** | **23.4** | **8.1** | **30.4** | **33.0** | | |
| 2726 | Pea meal *b* | 11.35 | 2.50 | 26.56 | | 57.62 | 1.97 | 2.8 | 29.9 | | 65.0 | 2.3 | N. J. Ex. Sta. Rep., 1885, p. 166 | 2726 |
| 2727 | Do | 12.08 | 2.61 | 21.37 | 11.06 | 52.02 | 0.86 | 3.0 | 24.3 | 12.6 | 59.1 | 1.0 | N. Y. State Ex. Sta. Rep., 1885, p. 305 | 2727 |
| 2728 | Do. *c* | 8.85 | 2.67 | 19.10 | 17.70 | 50.17 | 1.51 | 2.9 | 21.0 | 19.4 | 55.0 | 1.7 | Mass. State Ex. Sta. Rep., 1887, p. 101 | 2728 |
| 2729 | Do | 7.07 | 3.13 | 24.35 | 3.81 | 60.96 | 0.09 | 3.4 | 26.2 | 4.1 | 66.2 | 0.1 | Wis. Ex. Sta. Rep., 1888, p. 141 | 2729 |
| | Average, Nos. 2727 and 2728 | **10.46** | **2.64** | **20.23** | **14.38** | **51.10** | **1.19** | **2.9** | **22.5** | **16.0** | **57.2** | **1.4** | | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MIXED FEED. | | | | | | | | | | | | | |
| 2730 | Corn and oats *b* | 13.65 | 2.12 | 9.13 | 71.57 | | 3.53 | 2.4 | 10.6 | 82.9 | | 4.1 | N. J. Ex. Sta. Rep., 1885, p. 170 | 2730 |
| 2731 | Equal parts of corn and oats *b* | 11.25 | 1.88 | 10.38 | 72.16 | | 4.33 | 2.1 | 11.6 | 81.2 | | 5.1 | do | 2731 |
| 2732 | Do. *b* | 12.34 | 2.73 | 9.44 | 71.51 | | 3.98 | 3.1 | 10.7 | 81.7 | | 4.5 | do | 2732 |
| 2733 | Do. *b* | 11.35 | 2.23 | 9.94 | 71.48 | | 5.00 | 2.5 | 11.2 | 80.7 | | 5.6 | do | 2733 |
| 2734 | Do. *b* | 12.41 | 2.02 | 8.38 | 73.05 | | 4.14 | 2.3 | 9.6 | 83.4 | | 4.7 | do | 2734 |
| 2735 | Do. *b* | 10.72 | 1.90 | 9.38 | 73.65 | | 4.35 | 2.1 | 10.5 | 82.5 | | 4.9 | do | 2735 |
| 2736 | Do. *b* | 13.07 | 2.31 | 9.94 | 70.37 | | 4.31 | 2.6 | 11.5 | 81.0 | | 4.9 | do | 2736 |
| 2737 | Unequal parts of corn and oats: only enough corn to cause the mixture to grind *b*. | 11.11 | 3.61 | 10.44 | 70.39 | | 4.45 | 4.0 | 11.9 | 79.1 | | 5.1 | do | 2737 |
| 2738 | Two parts of corn, 1 part of oats *b* | 13.42 | 1.67 | 8.75 | 72.69 | | 3.47 | 2.0 | 10.1 | 83.9 | | 4.0 | do | 2738 |
| | Equal parts of corn and oats, Nos. 2731–2736. Maximum | 13.07 | 2.73 | 10.38 | 73.65 | | 5.00 | 3.1 | 11.6 | 83.4 | | 5.6 | | |
| | Minimum | 10.72 | 1.88 | 8.38 | 70.37 | | 3.98 | 2.1 | 9.6 | 80.7 | | 4.5 | | |
| | Average | **11.86** | **2.18** | **9.57** | **72.04** | | **4.35** | **2.4** | **10.9** | **81.7** | | **5.0** | | |
| 2739 | Corn, corn cob, and oats | 11.04 | 2.00 | 8.43 | 5.07 | 68.67 | 4.79 | 2.2 | 9.5 | 5.7 | 77.2 | 5.4 | Vt. Ex. Sta. Rep., 1887, p. 132 | 2739 |
| 2740 | Corn cob and oats *b* | 14.04 | 1.53 | 7.94 | 72.80 | | 3.69 | 2.3 | 9.3 | 84.1 | | 4.3 | N. J. Ex. Sta. Rep., 1885, p. 170 | 2740 |
| 2741 | Corn, rye, and oats *b* | 10.41 | 1.95 | 10.56 | 73.73 | | 3.35 | 2.2 | 11.8 | 82.2 | | 3.8 | do | 2741 |
| 2742 | Do. *b* | 11.78 | 2.01 | 8.82 | 74.34 | | 3.05 | 2.3 | 10.0 | 84.2 | | 3.5 | do | 2742 |
| 2743 | Corn and bran feed, 800 pounds corn, 500 pounds bran *b*. | 11.48 | 2.71 | 10.56 | 71.22 | | 4.03 | 3.0 | 11.9 | 80.6 | | 4.5 | do | 2743 |
| 2744 | Corn, oats, and wheat bran, "provender," 450 pounds corn, 125 pounds oats, and 100 pounds bran. | 9.40 | 3.10 | 13.00 | 10.44 | 58.84 | 5.22 | 3.4 | 4.3 | 11.5 | 65.0 | 5.8 | Mass. State Ex. Sta. Rep., 1888, p. 91 | 2744 |
| 2745 | Ground oat feed, contained admixtures richer in albuminoids and fat than oats. | 8.92 | 3.21 | 7.00 | 8.00 | 55.27 | 7.60 | 3.5 | 18.7 | 8.8 | 60.7 | 8.3 | do | 2745 |
| | BY-PRODUCTS AND WASTE MATERIALS. | | | | | | | | | | | | | |
| | BY-PRODUCTS FROM CORN (MAIZE). | | | | | | | | | | | | | |
| | Corn (maize) cob, flint varieties: | | | | | | | | | | | | | |
| 2746 | Norfolk White, raised in North Carolina | 7.18 | 1.23 | 1.81 | 29.80 | 59.57 | 0.31 | 1.4 | 1.9 | 32.1 | 64.3 | 0.3 | Conn. State Ex. Sta. Rep., 1878, p. 72 | 2746 |
| 2747 | Vermont White Cap, raised in Connecticut | 8.40 | 0.96 | 2.63 | 30.47 | 57.21 | 0.33 | 1.1 | 2.9 | 33.2 | 62.4 | 0.4 | do | 2747 |
| 2748 | Rowley, raised in Connecticut | 8.05 | 0.98 | 1.81 | 32.39 | 56.54 | 0.23 | 1.1 | 2.0 | 35.2 | 61.5 | 0.2 | do | 2748 |
| 2749 | Wheeler Prolific, raised in Massachusetts | 10.00 | 1.27 | 3.73 | 29.87 | 54.52 | 0.61 | 1.4 | 4.1 | 33.2 | 60.6 | 0.7 | Mass. Agr., 1879–'80, p. 250 | 2749 |
| 2750 | Rhode Island White Cap | 7.28 | 1.39 | 2.00 | 33.24 | 55.49 | 0.60 | 1.5 | 2.2 | 35.8 | 59.8 | 0.7 | Conn. State Ex. Sta. Rep., 1887, p. 119 | 2750 |
| | Corn (maize) cob, dent varieties: | | | | | | | | | | | | | |
| 2751 | Ohio Dent, raised in Connecticut | 8.21 | 0.97 | 2.56 | 30.99 | 56.99 | 0.28 | 1.1 | 2.8 | 33.7 | 62.1 | 0.3 | Conn. State Ex. Sta. Rep., 1878, p. 72 | 2751 |
| 2752 | Southern White, raised in Massachusetts | 10.00 | 0.68 | 3.14 | 30.05 | 55.79 | 0.34 | 0.8 | 3.4 | 33.4 | 62.0 | 0.4 | Mass. Agr., 1879–'80, p. 250 | 2752 |
| 2753 | Yellow Western, raised in Illinois | 10.00 | 0.85 | 3.26 | 28.23 | 57.25 | 0.41 | 1.0 | 3.7 | 31.3 | 63.5 | 0.5 | do | 2753 |
| 2754 | Kansas Dent | 9.25 | 1.16 | 1.91 | 31.22 | 55.86 | 0.60 | 1.4 | 2.1 | 34.4 | 61.4 | 0.7 | Kans. Agr. Col. Rep., 1884, p. 5 | 2754 |
| 2755 | Pride of the North *c* | 24.76 | 1.32 | 2.26 | 25.41 | 45.86 | 0.39 | 1.7 | 3.0 | 33.8 | 61.0 | 0.5 | Mass. State Ex. Sta. Rep., 1888, p. 84 | 2755 |
| | Corn (maize) cob, sweet varieties: | | | | | | | | | | | | | |
| 2756 | Immature, cut August 9 | 10.10 | 6.70 | 8.56 | 21.40 | 51.14 | 2.10 | 7.5 | 9.5 | 23.8 | 56.9 | 2.3 | Conn. State Ex. Sta. Rep., 1878, p. 72 | 2756 |
| 2757 | Immature, cut August 25 | 9.02 | 2.60 | 3.00 | 29.63 | 54.91 | 0.84 | 2.9 | 3.3 | 32.6 | 60.3 | 0.9 | do | 2757 |
| 2758 | Cut September 25 | 8.82 | 1.47 | 2.69 | 30.57 | 55.53 | 0.92 | 1.6 | 3.0 | 33.5 | 60.9 | 1.0 | do | 2758 |
| 2759 | Corn (maize) cob, soft variety, Tuscarora | 8.37 | 1.57 | 2.56 | 30.01 | 57.15 | 0.34 | 1.7 | 2.8 | 32.7 | 62.4 | 0.4 | do | 2759 |

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **BY-PRODUCTS AND WASTE MATERIALS—Continued.** | | | | | | | | | | | | | |
| | **BY-PRODUCTS FROM CORN (MAIZE)—continued.** | | | | | | | | | | | | | |
| | Corn (maize) cob, unclassified: | % | % | % | % | % | % | % | % | % | % | % | | |
| 2760 | Eight-rowed yellow | 11.45 | 1.36 | 1.23 | 38.26 | 47.62 | 0.08 | 1.5 | 1.4 | 43.2 | 53.8 | 0.1 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 29. | 2760 |
| 2761 | Canada yellow | 7.52 | 2.14 | 2.35 | 29.76 | 57.72 | 0.51 | 2.3 | 2.5 | 32.1 | 62.5 | 0.6 | Conn. State Ex. Sta. Rep., 1878, p. 72. | 2761 |
| 2762 | "Cob Meal," raised in Maryland | 14.42 | 1.12 | 2.33 | 36.10 | 45.31 | 0.72 | 1.3 | 2.7 | 42.2 | 53.0 | 0.8 | U. S. Dept. Agr. Rep., 1878, p. 136. | 2762 |
| 2763 | Cob meal *a* | 9.20 | 2.60 | 2.44 | 18.21 | 66.68 | 0.87 | 2.9 | 2.7 | 20.0 | 73.4 | 1.0 | U. S. Dept. Agr. Rep., 1881–'82, p. 553. | 2763 |
| 2764 | Do | 21.55 | 1.55 | 1.22 | 31.60 | 43.84 | 0.24 | 2.0 | 1.5 | 40.3 | 55.9 | 0.3 | N. Y. State Ex. Sta. Rep., 1886, p. 366. | 2764 |
| 2765 | Brazilian flour corn | 7.87 | 2.73 | 2.81 | 26.14 | 58.87 | 1.58 | 3.0 | 3.1 | 28.3 | 63.9 | 1.7 | Vt. Ex. Sta. Rep., 1887, p. 132 | 2765 |
| | All analyses, excluding Nos. 2756 and 2757. Maximum | 24.76 | 2.73 | 3.73 | 38.26 | 66.68 | 0.92 | 3.0 | 4.1 | 43.2 | 73.4 | 1.0 | | |
| | All analyses, excluding Nos. 2756 and 2757. Minimum | 7.18 | 0.68 | 1.22 | 18.21 | 43.84 | 0.08 | 0.8 | 1.4 | 20.0 | 53.0 | 0.1 | | |
| | All analyses, excluding Nos. 2756 and 2757. Average | **10.68** | **1.41** | **2.37** | **30.13** | **54.89** | **0.52** | **1.6** | **2.7** | **33.7** | **61.4** | **0.6** | | |
| | Corn (maize) cob, field-cured, flint varieties, from mature ears: | | | | | | | | | | | | | |
| | Rhode Island White Cap—* | | | | | | | | | | | | | |
| 2766 | One stalk in 4 feet | 48.61 | 0.75 | 1.10 | 17.89 | 31.43 | 0.22 | 1.5 | 2.2 | 34.8 | 61.1 | 0.4 | Conn. State Ex. Sta. Rep., 1889, p. 25. | 2766 |
| 2767 | One stalk in 2 feet | 88.32 | 0.12 | 0.26 | 4.17 | 7.09 | 0.04 | 1.0 | 2.2 | 35.7 | 60.7 | 0.4 | do | 2767 |
| 2768 | One stalk to a foot | 49.09 | 0.56 | 1.28 | 18.61 | 30.28 | 0.18 | 1.1 | 2.5 | 36.6 | 39.5 | 0.3 | do | 2768 |
| 2769 | Two stalks to a foot | 92.31 | 0.09 | 0.16 | 2.77 | 4.58 | 0.03 | 1.2 | 2.2 | 36.3 | 59.9 | 0.4 | do | 2769 |
| 2770 | Four stalks to a foot | 85.38 | 0.19 | 0.36 | 5.25 | 8.75 | 0.07 | 1.3 | 2.5 | 35.9 | 59.8 | 0.5 | do | 2770 |
| 2771 | Eight stalks to a foot (extra phosphate) | 60.38 | 0.53 | 0.81 | 14.70 | 23.42 | 0.16 | 1.4 | 2.0 | 37.1 | 59.1 | 0.4 | do | 2771 |
| | Corn (maize) cob, field-cured, flint varieties, from small and immature ears: | | | | | | | | | | | | | |
| | Rhode Island White Cap—* | | | | | | | | | | | | | |
| 2772 | One stalk in 4 feet | 38.00 | 1.37 | 2.92 | 20.87 | 36.44 | 0.40 | 2.2 | 4.7 | 33.6 | 58.8 | 0.7 | Conn. State Ex. Sta. Rep., 1889, p. 26. | 2772 |
| 2773 | One stalk in 2 feet | 43.96 | 0.97 | 2.15 | 19.62 | 32.96 | 0.35 | 1.7 | 3.9 | 34.9 | 58.9 | 0.6 | do | 2773 |
| 2774 | One stalk to a foot | 55.25 | 0.92 | 2.19 | 15.62 | 25.71 | 0.31 | 2.0 | 4.9 | 34.9 | 57.5 | 0.7 | do | 2774 |
| 2775 | Two stalks to a foot | 76.85 | 0.43 | 0.78 | 8.12 | 13.63 | 0.19 | 1.9 | 3.4 | 35.0 | 58.9 | 0.8 | do | 2775 |
| 2776 | Four stalks to a foot | 40.35 | 1.10 | 2.28 | 20.75 | 35.17 | 0.35 | 1.8 | 3.8 | 34.8 | 59.0 | 0.6 | do | 2776 |
| 2777 | Eight stalks to a foot | 37.72 | 1.09 | 1.32 | 22.10 | 37.43 | 0.34 | 1.7 | 2.1 | 35.5 | 60.1 | 0.6 | do | 2777 |
| 2778 | Eight stalks to a foot (extra phosphate) | 60.38 | 0.53 | 0.81 | 14.70 | 23.42 | 0.16 | 1.3 | 2.1 | 37.1 | 59.1 | 0.4 | do | 2778 |
| | Corn (maize) cob, field-cured, dent varieties, from mature ears: | | | | | | | | | | | | | |
| 2779 | 1.13 per cent of the stover *a*† | 18.92 | 2.19 | 3.36 | 28.78 | 44.86 | 0.90 | 2.7 | 4.3 | 35.5 | 55.4 | 1.1 | Pa. Ex. Sta. Rep., 1887, p. 154 | 2779 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | White-Edged Dent, crop of 1888—* | | | | | | | | | | | | |
| 2780 | One stalk in 4 feet | 65.73 | 0.45 | 1.06 | 10.88 | 21.69 | 0.20 | 1.3 | 3.1 | 31.7 | 63.3 | 0.6 | Conn. State Ex. Sta. Rep., 1889, p.25 |
| 2781 | One stalk in 2 feet | 61.59 | 0.42 | 0.80 | 13.01 | 24.00 | 0.18 | 1.1 | 2.1 | 33.9 | 62.4 | 0.5 | do |
| 2782 | One stalk to a foot | 61.94 | 0.41 | 0.82 | 12.40 | 24.20 | 0.23 | 1.1 | 2.2 | 32.6 | 63.5 | 0.6 | do |
| 2783 | Two stalks to a foot | 84.66 | 0 14 | 0.28 | 5.29 | 9.58 | 0.05 | 0.9 | 1.8 | 34.5 | 62.5 | 0.3 | do |
| 2784 | Two stalks to a foot (extra phosphate) | 80.19 | 0.24 | 0.47 | 6.48 | 12.55 | 0.07 | 1.2 | 2.4 | 32.7 | 63.4 | 0.3 | do |
| 2785 | Four stalks to a foot | 59.89 | 0.51 | 0.88 | 13.80 | 24.73 | 0.19 | 1.2 | 2.2 | 34.4 | 61.7 | 0.5 | do |
| 2786 | Four stalks to a foot (extra phosphate) | 51.45 | 0.60 | 1.14 | 15.94 | 30.71 | 0.16 | 1.2 | 2.3 | 32.9 | 63.3 | 0.3 | do |
| 2787 | Eight stalks to a foot | 66.25 | 0.39 | 0.73 | 11.68 | 20.75 | 0.20 | 1.2 | 2.2 | 34.6 | 61.4 | 0.6 | do |
| | White-Edged Dent, crop of 1889—* | | | | | | | | | | | | |
| 2788 | One stalk in 4 feet | 46.56 | 0.78 | 1.13 | 17.54 | 33.65 | 0.34 | 1.5 | 2.1 | 32.8 | 63.0 | 0.6 | Conn. State Ex. Sta. Rep., 1889, p.222 |
| 2789 | One stalk in 2 feet | 37.48 | 0.68 | 1.12 | 21.88 | 38.53 | 0.31 | 1.1 | 1.8 | 35.0 | 61.6 | 0.5 | do |
| 2790 | One stalk to a foot | 43.51 | 0.93 | 1.08 | 20.39 | 33.71 | 0.38 | 1.7 | 1.9 | 36.1 | 59.7 | 0.6 | do |
| 2791 | Two stalks to a foot | 45.00 | 0.91 | 1.33 | 18.57 | 33.95 | 0.24 | 1.7 | 2.4 | 33.7 | 61.7 | 0.5 | do |
| 2792 | Four stalks to a foot | 48.16 | 1.08 | 1.52 | 17.06 | 31.85 | 0.33 | 2.1 | 3.1 | 32.8 | 61.4 | 0.6 | do |
| 2793 | Eight stalks to a foot | 44.98 | 1.06 | 1.61 | 18.83 | 33.17 | 0.35 | 2.0 | 2.9 | 34.3 | 60.2 | 0.6 | do |
| | Corn (maize) cob, field-cured, dent varieties, from small and immature ears: | | | | | | | | | | | | |
| | White-Edged Dent, crop of 1888—* | | | | | | | | | | | | |
| 2794 | One stalk in 4 feet | 71.28 | 0.64 | 1.49 | 8.22 | 18.14 | 0.33 | 2.2 | 5.2 | 28.6 | 63.2 | 0.8 | Conn. State Ex. Sta. Rep., 1889, p. 26 |
| 2795 | One stalk in 2 feet | 53.16 | 0.78 | 2.47 | 14.57 | 28.72 | 0.30 | 1.7 | 5.3 | 31.1 | 61.3 | 0.6 | do |
| 2796 | One stalk to a foot | 52.86 | 0.67 | 1.78 | 14.71 | 29.76 | 0.22 | 1.4 | 3.7 | 31.2 | 63.3 | 0.4 | do |
| 2797 | Two stalks to a foot | 57.92 | 0.69 | 1.42 | 13.65 | 25.94 | 0.38 | 1.6 | 3.3 | 32.5 | 61.8 | 0.8 | do |
| 2798 | Two stalks to a foot (extra phosphate) | 64.90 | 0.62 | 1.38 | 11.34 | 21.51 | 0.26 | 1.8 | 3.9 | 32.3 | 61.4 | 0.6 | do |
| 2799 | Four stalks to a foot | 61.76 | 0.66 | 0.89 | 12.95 | 23.42 | 0.32 | 1.7 | 2.3 | 33.9 | 61.4 | 0.7 | do |
| 2800 | Four stalks to a foot (extra phosphate) | 62.38 | 0.60 | 1.46 | 12.20 | 23.16 | 0.20 | 1.5 | 3.9 | 32.4 | 61.7 | 0.5 | do |
| 2801 | Eight stalks to a foot | 58.24 | 0.66 | 1.39 | 14.17 | 25.27 | 0.27 | 1.5 | 3.3 | 34.0 | 60.6 | 0.6 | do |
| 2802 | Hominy chops or Baltimore meal | 13.53 | 2.44 | 9.50 | 3.19 | 62.02 | 9.32 | 2.8 | 10.9 | 3.7 | 71.8 | 10.8 | Conn. State Ex. Sta. Rep., 1879, p. 93 |
| 2803 | Do | 11.56 | 2.67 | 9.82 | 4.79 | 62.58 | 8.58 | 3.0 | 11.1 | 5.4 | 70.8 | 9.7 | do |
| 2804 | Do | 12.56 | 2.64 | 9.63 | 4.02 | 60.95 | 10.20 | 3.1 | 10.9 | 4.6 | 69.8 | 11.6 | N. J. Ex. Sta. Rep., 1880, p. 47 |
| 2805 | Do | 11.91 | 2.09 | 9.38 | 3.65 | 64.34 | 8.63 | 2.4 | 10.7 | 4.2 | 72.8 | 9.9 | N. J. Ex. Sta. Rep., 1882, p. 71 |
| 2806 | Do | 8.65 | ..... | 8.69 | ..... | ..... | 7.16 | ..... | 9.5 | ..... | ..... | 7.9 | Conn. State Ex. Sta. Rep., 1883, p. 84 |
| 2807 | Do | 11.14 | 2.32 | 9.50 | 2.54 | 67.96 | 6.54 | 2.6 | 10.7 | 2.9 | 76.5 | 7.3 | do |
| 2808 | Do | 13.46 | 2.54 | 9.75 | 2.79 | 64.27 | 7.19 | 2.9 | 11.3 | 3.2 | 74.3 | 8.3 | do |
| 2809 | Do | 12.91 | ..... | 9.00 | ..... | ..... | 7.17 | ..... | 10.3 | ..... | ..... | 8.2 | do |
| 2810 | Do | 10.64 | 3.39 | 8.69 | ..... | ..... | 5.95 | 3.8 | 9.7 | ..... | ..... | 6.7 | do |
| 2811 | Do | 11.46 | 2.30 | 7.88 | 3.30 | 67.68 | 7.38 | 2.6 | 8.9 | 3.7 | 76.6 | 8.2 | do |
| 2812 | Do. c | 8.93 | 1.89 | 10.20 | 3.43 | 71.10 | 4.45 | 2.1 | 11.2 | 3.8 | 78.0 | 4.9 | Mass. State Ex. Sta. Rep., 1883, p. 69 |
| 2813 | Hominy chops or Baltimore meal, Western | 7.39 | 2.69 | 10.13 | 72.20 | | 7.59 | 2.8 | 10.9 | 78.1 | | 8.2 | N. J. Ex. Sta. Rep., 1885, p. 166 |
| 2814 | Hominy chops or Baltimore meal | 8.11 | 2.97 | 10.81 | 4.39 | 62.49 | 11.23 | 3.2 | 11.8 | 4.8 | 68.0 | 12.2 | Mass. State Ex. Sta. Rep., 1885, p. 100 |
| 2815 | Do | 9.22 | 3.12 | 11.20 | 4.02 | 62.88 | 9.56 | 3.4 | 12.3 | 4.4 | 69.4 | 10.5 | Conn. State Ex. Sta. Rep., 1885, p. 41 |
| 2816 | Do | 10.70 | 2.52 | 10.61 | 3.30 | 63.15 | 9.72 | 2.8 | 11.9 | 3.7 | 70.7 | 10.9 | Mass. State Ex. Sta. Rep., 1886, p. 40 |
| 2817 | Do | 10.00 | 2.20 | 8.82 | 6.67 | 65.81 | 6.50 | 2.4 | 9.8 | 7.4 | 73.2 | 7.2 | Ohio Ex. Sta. Rep., 1887, p. 259 |
| | All complete analyses—Maximum | 13.53 | 3.12 | 11.20 | 6.67 | 71.10 | 11.23 | 3.4 | 12.3 | 7.4 | 78.0 | 12.2 | |
| | All complete analyses—Minimum | 8.11 | 1.89 | 7.88 | 2.54 | 60.95 | 4.45 | 2.1 | 8.9 | 2.9 | 69.4 | 4.9 | |
| | All complete analyses—Average | **11.05** | **2.48** | **9.75** | **3.84** | **64.60** | **8.28** | **2.8** | **11.10** | **4.3** | **72.6** | **9.3** | |

*Rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre.

†Adds 99.01 (fresh or air-dry material).

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **BY-PRODUCTS AND WASTE MATERIALS—Continued.** | | | | | | | | | | | | | |
| | BY-PRODUCTS FROM CORN (MAIZE)—continued. | | | | | | | | | | | | | |
| | Corn (maize) germ: | % | % | % | % | % | % | % | % | % | % | % | | |
| 2818 | Corn feed, ground germ | 9.35 | 1.92 | 9.85 | 5.76 | 61.91 | 11.21 | 2.1 | 10.8 | 6.3 | 68.6 | 12.2 | N. Y. State Ex. Sta. Rep., 1886, p. 366. | 2818 |
| 2819 | Corn hearts | 9.72 | 7.37 | 9.85 | 4.62 | 62.61 | 5.83 | 8.2 | 11.0 | 5.1 | 69.3 | 6.4 | Wis. Ex. Sta. Rep., 1888, p. 141 | 2819 |
| 2820 | Corn "germs" | 13.02 | 2.70 | 9.73 | 1.91 | 67.42 | 5.22 | 3.1 | 11.2 | 2.2 | 77.5 | 6.0 | Mass. State Ex. Sta. Rep., 1889, p. 142. | 2820 |
| | Average | **10.69** | **3.99** | **9.81** | **4.10** | **63.99** | **7.42** | **4.5** | **11.0** | **4.6** | **71.7** | **8.2** | | |
| | Corn (maize) bran: | | | | | | | | | | | | | |
| 2821 | Corn bran *b* | 7.66 | 1.42 | 6.94 | | 80.01 | 3.97 | 1.5 | 7.6 | | 86.6 | 4.3 | N. J. Ex. Sta. Rep., 1885, p. 176 | 2821 |
| 2822 | Corn feed, ground hulls | 6.12 | 1.50 | 7.04 | 13.26 | 64.55 | 7.53 | 1.6 | 7.5 | 14.1 | 68.8 | 8.0 | N. Y. State Ex. Sta. Rep., 1886, p. 366. | 2822 |
| 2823 | Corn bran | 9.75 | 16.45 | 7.12 | 11.30 | 50.38 | 5.00 | 18.2 | 7.9 | 12.5 | 55.9 | 5.5 | Wis. Ex. Sta. Rep., 1888, p. 141 | 2823 |
| 2824 | Corn "husks" or "chaff" | 13.26 | 2.43 | 4.86 | 16.38 | 61.68 | 1.39 | 2.8 | 5.6 | 18.9 | 71.1 | 1.6 | Mass. State Ex. Sta. Rep., 1889, p. 142. | 2824 |
| | BY-PRODUCTS FROM MAIZE IN GLUCOSE MANUFACTURE. | | | | | | | | | | | | | |
| 2825 | Gluten meal *c* | 8.43 | 0.59 | 35.00 | 3.25 | 44.72 | 8.01 | 0.6 | 38.2 | 3.6 | 48.8 | 8.8 | Mass. State Ex. Sta. Rep., 1883, p. 70. | 2825 |
| 2826 | Do | 10.23 | 0.58 | 30.12 | 1.08 | 53.45 | 4.54 | 0.6 | 33.6 | 1.2 | 59.5 | 5.1 | Mass. State Ex. Sta. Rep., 1883, p. 71. | 2826 |
| 2827 | Do | 7.31 | 0.74 | 28.03 | 0.73 | 54.46 | 8.73 | 0.8 | 30.2 | 0.8 | 58.8 | 9.4 | N. Y. State Ex. Sta. Rep., 1883, p. 151. | 2827 |
| 2828 | Do | 11.68 | 0.67 | 24.95 | 0.68 | 58.53 | 3.49 | 0.8 | 28.2 | 0.8 | 66.3 | 3.9 | Mass. State Ex. Sta. Rep., 1884, p. 56. | 2828 |
| 2829 | Do | 9.92 | 1.04 | 29.50 | 1.04 | 54.32 | 4.18 | 1.1 | 32.7 | 1.2 | 60.3 | 4.7 | N. J. Ex. Sta. Rep., 1884, p. 107 | 2829 |
| 2830 | Do | 8.47 | 0.70 | 32.32 | 1.58 | 48.39 | 8.54 | 0.8 | 35.3 | 1.7 | 52.8 | 9.4 | Mass. State Ex. Sta. Rep., 1885, p. 22. | 2830 |
| 2831 | Do | 8.25 | 0.86 | 30.16 | 2.44 | 53.13 | 5.16 | 0.9 | 32.9 | 2.7 | 57.9 | 5.6 | N. Y. State Ex. Sta. Rep., 1885, p. 306. | 2831 |
| 2832 | Do | 16.50 | 0.61 | 15.03 | 7.81 | 55.26 | 4.79 | 0.7 | 18.0 | 9.3 | 66.3 | 5.7 | do | 2832 |
| 2833 | Do | 12.29 | 0.66 | 15.84 | 8.25 | 57.96 | 5.00 | 0.7 | 18.1 | 9.4 | 66.1 | 5.7 | do | 2833 |
| 2834 | Do | 9.00 | 0.74 | 17.40 | 8.59 | 56.93 | 7.34 | 0.8 | 19.1 | 9.4 | 62.6 | 8.1 | do | 2834 |
| 2835 | Do | 8.86 | 1.01 | 29.12 | 0.86 | 53.91 | 6.24 | 1.1 | 31.9 | 0.9 | 59.3 | 6.8 | Conn. State Ex. Sta. Rep., 1885, p. 42. | 2835 |
| 2836 | Do | 8.95 | 0.69 | 28.05 | 1.44 | 54.03 | 6.84 | 0.7 | 30.8 | 1.6 | 59.4 | 7.5 | Mass. State Ex. Sta. Rep., 1886, p. 38. | 2836 |
| 2837 | Do | 12.29 | 0.66 | 29.47 | 0.97 | 50.62 | 5.99 | 0.8 | 33.7 | 1.1 | 57.6 | 6.8 | Conn. State Ex. Sta. Rep., 1886, p. 113. | 2837 |
| 2838 | Do. *c* | 8.83 | 0.67 | 28.65 | 0.72 | 53.41 | 7.72 | 0.7 | 31.4 | 0.8 | 58.6 | 8.5 | Mass. State Ex. Sta. Rep., 1887, p. 34. | 2838 |
| 2839 | Do | 8.45 | 0.69 | 32.33 | 1.58 | 48.40 | 8.55 | 0.7 | 35.3 | 1.7 | 53.0 | 9.3 | Mass. State Ex. Sta. Rep., 1887, p. 84. | 2839 |
| 2840 | Do | 10.04 | 0.70 | 31.18 | 4.00 | 45.68 | 8.40 | 0.8 | 34.7 | 4.4 | 50.8 | 9.3 | Mass. State Ex. Sta. Rep., 1887, p. 85. | 2840 |
| 2841 | Do | 8.23 | 1.27 | 27.38 | 1.46 | 55.98 | 5.68 | 1.4 | 29.8 | 1.6 | 61.0 | 6.2 | Conn. State Ex. Sta. Rep., 1887, p. 105. | 2841 |
| 2842 | Do | 10.19 | 0.63 | 29.62 | 1.65 | 50.15 | 7.76 | 0.7 | 33.0 | 1.8 | 32.9 | 8.6 | Vt. Ex. Sta. Rep., 1887, p. 135 | 2842 |
| 2843 | Do | 9.45 | 0.56 | 27.81 | 1.57 | 52.92 | 7.69 | 0.7 | 30.6 | 1.8 | 58.4 | 8.5 | do | 2843 |
| 2844 | Do | 7.97 | 1.67 | 35.54 | 1.04 | 46.79 | 6.99 | 1.8 | 38.6 | 2.1 | 50.9 | 7.6 | Vt. Ex. Sta. Rep., 1887, p. 137 | 2844 |
| 2845 | Do | 9.77 | 0.84 | 31.97 | 4.15 | 47.29 | 5.98 | 0.9 | 35.4 | 4.6 | 52.5 | 6.6 | Mass. State Ex. Sta. Rep., 1888, p. 35. | 2845 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2846 | Do | 10.59 | 0.47 | 33.12 | 0.80 | 50.11 | 4.91 | 0.5 | 37.0 | 0.9 | 56.1 | 5.5 | Mass. State Ex. Sta. Rep., 1888, p. 50. | 2846 |
| 2847 | Do | 10.09 | 0.46 | 35.32 | 0.77 | 48.99 | 4.37 | 0.5 | 39.3 | 0.9 | 54.4 | 4.9 | Mass. State Ex. Sta. Rep., 1888, p. 83. | 2847 |
| 2848 | Do | 9.50 | 0.98 | 32.75 | 4.29 | 48.93 | 3.55 | 1.1 | 36.2 | 4.7 | 54.1 | 3.9 | Mass. State Ex. Sta. Rep., 1888, p. 89. | 2848 |
| 2849 | Do | 11.10 | 0.49 | 30.93 | 0.81 | 51.22 | 5.45 | 0.5 | 34.8 | 0.9 | 57.7 | 6.1 | Mass. State Ex. Sta. Rep., 1888, p. 90. | 2849 |
| 2850 | Do | 6.40 | 1.02 | 24.25 | 5.03 | 57.23 | 9.07 | 1.1 | 22.7 | 5.4 | 61.1 | 9.7 | Vt. Ex. Sta. Rep., 1888, p. 76 | 2850 |
| 2851 | Do | 9.15 | 0.83 | 32.31 | 0.73 | 47.37 | 9.61 | 0.9 | 35.6 | 0.8 | 52.1 | 10.6 | ....do | 2851 |
| 2852 | Do | 10.22 | 0.45 | 27.02 | 0.54 | 56.83 | 4.94 | 0.5 | 30.1 | 0.6 | 63.3 | 5.5 | Mass. State Ex. Sta. Rep., 1889. p. 32. | 2852 |
| 2853 | Do | 9.49 | 0.09 | 27.06 | 0.27 | 57.01 | 6.06 | 0.1 | 29.9 | 0.3 | 63.0 | 6.7 | Mass. State Ex. Sta. Rep., 1889, p. 134. | 2853 |
| 2854 | Do | 10.50 | 0.27 | 26.13 | 0.36 | 56.39 | 6.35 | 0.3 | 29.2 | 0.4 | 63.0 | 7.1 | ....do | 2854 |
| 2855 | Do | 11.29 | 0.62 | 27.41 | 0.62 | 56.41 | 3.63 | 0.7 | 30.9 | 0.7 | 63.6 | 4.1 | ....do | 2855 |
| 2856 | Do | 9.89 | 0.72 | 26.76 | 0.63 | 56.86 | 5.14 | 0.8 | 29.7 | 0.7 | 63.1 | 5.7 | Mass. State Ex. Sta. Rep., 1889, p. 134. | 2856 |
| 2857 | Do | 7.85 | 1.65 | 37.87 | 1.47 | 35.13 | 16.03 | 1.8 | 41.1 | 1.6 | 38.1 | 17.4 | ....do | 2857 |
| 2858 | Do | 9.62 | 0.90 | 21.97 | 3.89 | 56.57 | 7.05 | 1.0 | 24.3 | 4.3 | 62.6 | 7.8 | Mass. State Ex. Sta. Rep., 1889, p. 135. | 2858 |
| 2859 | Do | 9.80 | 1.08 | 28.23 | 1.53 | 53.05 | 6.31 | 1.2 | 31.3 | 1.7 | 58.8 | 7.0 | ....do | 2859 |
| 2860 | Do. *c* | 10.52 | 0.70 | 29.70 | 0.81 | 54.90 | 3.37 | 0.8 | 33.2 | 0.9 | 61.3 | 3.8 | N. H. Ex. Sta. Bul. 8, 1888 | 2860 |
| 2861 | Do. *b* | 7.30 | 1.20 | 36.89 | 1.02 | 37.28 | 16.31 | 1.3 | 39.8 | 1.1 | 40.2 | 17.6 | Mass. State Ex. Sta. Bul. 37, 1880 | 2861 |
| | All analyses, excluding Nos. 2832–2834, 2857, and 2861. Maximum | 12.29 | 1.67 | 25.34 | 5.03 | 58.53 | 9.61 | 1.4 | 39.3 | 5.4 | 66.3 | 10.6 | | |
| | All analyses, excluding Nos. 2832–2834, 2857, and 2861. Minimum | 6.40 | 0.09 | 21.25 | 0.27 | 44.72 | 3.37 | 0.1 | 22.7 | 0.3 | 32.9 | 3.8 | | |
| | All analyses, excluding Nos. 2832–2834, 2857, and 2861. Average | **9.55** | **0.74** | **29.41** | **1.60** | **52.44** | **6.26** | **0.8** | **32.5** | **1.8** | **57.9** | **7.0** | | |
| 2862 | Buffalo sugar meal, 1 bushel said to weigh 50 pounds. | 62.91 | 0.15 | 3.27 | 2.00 | 27.60 | 4.07 | 0.5 | 8.8 | 5.4 | 74.4 | 10.9 | Conn. State Ex. Sta. Rep., 1888, p. 153. | 2862 |
| 2863 | Glucose waste, from glucose factories after separating starch. | 76.00 | 0.51 | 3.72 | 0.75 | 17.39 | 1.63 | 2.1 | 15.5 | 3.1 | 72.5 | 6.8 | U. S. Dept. Agr. Rep., 1880, p. 169 | 2863 |
| 2864 | Sugar feed, kiln-dried | 6.57 | 3.22 | 13.50 | 10.65 | 54.85 | 11.21 | 3.4 | 14.5 | 11.4 | 58.7 | 12.0 | Conn. State Ex. Sta. Rep., 1881, p. 83. | 2864 |
| 2865 | Do | 10.40 | 0.78 | 13.13 | 8.44 | 61.38 | 5.87 | 0.9 | 14.7 | 9.4 | 68.5 | 6.5 | ....do | 2865 |
| 2866 | Gluten No. 1, feed | 11.66 | 0.56 | 17.81 | 3.08 | 59.56 | 7.33 | 0.7 | 20.1 | 3.5 | 67.4 | 8.3 | Conn. State Ex. Sta. Rep., 1881, p. 152. | 2866 |
| | BY-PRODUCTS FROM MAIZE IN STARCH MANUFACTURE. | | | | | | | | | | | | | |
| | Starch feed, wet: | | | | | | | | | | | | | |
| 2867 | Starch waste | 72.19 | 0.12 | 3.56 | 3.36 | 18.78 | 1.99 | 0.4 | 12.9 | 12.0 | 67.5 | 7.2 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 38. | 2867 |
| 2868 | Starch waste, from Glen Cove factory | 62.27 | 0.27 | 5.67 | 1.58 | 28.90 | 1.31 | 0.7 | 15.0 | 4.2 | 76.6 | 3.5 | Conn. State Ex. Sta. Rep., 1878, p. 76. | 2868 |
| 2869 | Do | 64.98 | 0.27 | 5.81 | 2.83 | 22.73 | 3.38 | 0.8 | 16.6 | 8.0 | 64.9 | 9.7 | N. J. Ex. Sta. Rep., 1883, p. 74 | 2869 |
| 2870 | Do | 68.51 | 0.21 | 6.55 | 2.07 | 18.69 | 3.97 | 0.6 | 20.8 | 6.6 | 59.4 | 12.6 | N. Y. State Ex. Sta. Rep., 1885, p. 306. | 2870 |
| 2871 | Do | 64.50 | 0.21 | 4.65 | 4.34 | 24.30 | 2.00 | 0.6 | 13.1 | 12.2 | 68.5 | 5.6 | ....do | 2871 |
| 2872 | Do | 63.79 | 0.23 | 7.70 | 3.29 | 20.72 | 4.27 | 0.7 | 21.3 | 9.1 | 57.1 | 11.8 | ....do | 2872 |
| 2873 | Do | 63.60 | 0.24 | 7.66 | 3.68 | 20.78 | 4.04 | 0.6 | 21.1 | 10.1 | 51.1 | 11.1 | ....do | 2873 |
| 2874 | Do | 65.50 | 0.18 | 4.31 | 4.29 | 22.46 | 3.26 | 0.5 | 12.5 | 12.4 | 65.1 | 9.5 | ....do | 2874 |
| 2875 | Do | 57.04 | 0.37 | 9.63 | 3.24 | 25.34 | 4.38 | 0.9 | 22.4 | 7.5 | 59.0 | 10.2 | Mass. State Ex. Sta. Rep., 1886, p. 42. | 2875 |
| 2876 | Do | 69.95 | 0.60 | 4.29 | 4.41 | 18.67 | 2.08 | 2.0 | 14.3 | 14.7 | 62.1 | 6.9 | Ohio Ex. Sta. Rep., 1887, p. 259 | 2876 |
| 2877 | Do | 66.53 | 0.25 | 6.01 | 2.00 | 22.47 | 2.74 | 0.8 | 18.2 | 6.0 | 66.9 | 8.1 | Conn. State Ex. Sta. Rep., 1888, p. 153. | 2877 |
| 2878 | Do | 66.19 | 0.48 | 7.58 | 1.07 | 19.63 | 4.25 | 1.4 | 22.4 | 5.5 | 58.1 | 12.6 | Vt. Ex. Sta. Rep., 1888, p. 76 | 2878 |
| | Maximum | 72.19 | 0.60 | 9.63 | 4.41 | 28.90 | 4.38 | 2.0 | 22.4 | 14.7 | 68.5 | 12.6 | | |
| | Minimum | 62.27 | 0.12 | 3.56 | 1.58 | 18.67 | 1.31 | 0.4 | 12.5 | 4.2 | 51.1 | 3.5 | | |
| | Average | **65.42** | **0.29** | **6.12** | **3.08** | **21.95** | **3.14** | **0.8** | **17.6** | **8.9** | **63.6** | **9.1** | | |

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **BY-PRODUCTS AND WASTE MATERIALS—Continued.** | | | | | | | | | | | | | |
| | **BY-PRODUCTS FROM MAIZE IN STARCH MANUFACTURE—continued.** | | | | | | | | | | | | | |
| | Starch feed, dried: | % | % | % | % | % | % | % | % | % | % | % | | |
| 2879 | Residue from starch works | 8.88 | 1.02 | 15.13 | 8.30 | 58.04 | 8.63 | 1.1 | 16.6 | 9.1 | 63.7 | 9.5 | N. J. Ex. Sta. Rep., 1880, p. 46 | 2879 |
| 2880 | Starch refuse, dry feed | 6.00 | 0.72 | 16.04 | 13.02 | 58.14 | 6.08 | 0.8 | 17.0 | 13.9 | 61.8 | 6.5 | N. Y. State Ex. Sta. Rep., 1885, p. 306 | 2880 |
| 2881 | Corn refuse | 9.22 | 9.35 | 10.13 | 1.23 | 65.27 | 3.80 | 10.3 | 11.2 | 1.3 | 73.0 | 4.2 | Wis. Ex. Sta. Rep., 1888, p. 141 | 2881 |
| | **BY-PRODUCTS FROM OATS.** | | | | | | | | | | | | | |
| 2882 | Oat bran | 7.70 | 3.70 | 7.10 | 19.30 | 57.90 | 2.30 | 4.1 | 7.8 | 21.3 | 64.3 | 2.5 | Ontario Agr. Col. Bul. 14, 1887, p. 6 | 2882 |
| 2883 | Oat feed, from oatmeal manufacture *c* | 8.19 | 4.24 | 12.64 | 12.48 | 56.31 | 6.14 | 4.6 | 13.8 | 13.6 | 61.2 | 6.8 | Conn. State Ex. Sta. Rep., 1886, p. 111 | 2883 |
| 2884 | Middlings, from oatmeal manufacture | 9.19 | 3.24 | 20.00 | 3.80 | 56.19 | 7.58 | 3.5 | 22.0 | 4.2 | 61.9 | 8.4 | Conn. State Ex. Sta. Rep., 1888, p. 151 | 2884 |
| 2885 | Oat feed *b* | 6.36 | 3.18 | 15.27 | 3.74 | 63.68 | 7.77 | 3.4 | 16.3 | 4.0 | 68.0 | 8.3 | Mass. State Ex. Sta. Bul. 37, 1890 | 2885 |
| 2886 | Do. *b* | 6.85 | 4.19 | 16.21 | 4.38 | 61.67 | 6.70 | 4.5 | 17.4 | 4.7 | 66.2 | 7.2 | do | 2886 |
| | Average, excluding 2882 | **7.65** | **3.71** | **16.03** | **6.10** | **59.46** | **7.05** | **4.0** | **17.3** | **6.6** | **64.4** | **7.7** | | |
| | **BY-PRODUCTS FROM BARLEY.** | | | | | | | | | | | | | |
| 2887 | Barley bran | 12.00 | 4.10 | 14.80 | 19.40 | 45.60 | 4.10 | 4.7 | 16.8 | 22.0 | 51.8 | 4.7 | Ontario Agr. Col. Bul. 14, 1887, p. 6 | 2887 |
| 2888 | Barley feed, from pearled barley | 13.20 | 4.25 | 11.94 | 7.98 | 59.38 | 3.25 | 4.8 | 13.6 | 9.2 | 68.6 | 3.8 | Conn. State Ex. Sta. Rep., 1886, p. 112 | 2888 |
| 2889 | Barley screenings | 12.42 | 3.60 | 12.12 | 7.62 | 61.60 | 2.64 | 4.1 | 13.8 | 8.6 | 70.4 | 3.1 | Conn. State Ex Sta. Rep., 1888, p. 151 | 2889 |
| 2890 | Do | 12.02 | 3.51 | 12.50 | 7.00 | 62.03 | 2.94 | 4.0 | 14.1 | 8.0 | 70.5 | 3.4 | do | 2890 |
| | Average | **12.22** | **3.55** | **12.31** | **7.31** | **61.82** | **2.79** | **4.0** | **14.0** | **8.3** | **70.4** | **3.3** | | |
| 2891 | Malt sprouts | 11.55 | 6.68 | 25.91 | 9.30 | 45.47 | 1.09 | 7.5 | 29.3 | 10.5 | 51.6 | 1.1 | Conn. State Ex. Sta. Rep., 1877, p. 50 | 2891 |
| 2892 | Do | 7.31 | 6.59 | 21.94 | 10.88 | 50.30 | 2.98 | 7.1 | 23.7 | 11.9 | 54.1 | 3.2 | N. Y. Cornell Ex. Sta. Rep., 1883, p. 41 | 2892 |
| 2893 | Do | 11.97 | 3.75 | 21.00 | 11.99 | 50.00 | 1.29 | 4.3 | 23.9 | 13.6 | 56.7 | 1.5 | Wis. Ex. Sta. Bul. 3., p. 6 | 2893 |
| 2894 | Do. *b* | 10.47 | 12.48 | 14.81 | 60.84 | | 1.40 | 13.9 | 16.4 | 68.1 | | 1.6 | N. J. Ex. Sta. Rep., 1885, p. 166 | 2894 |
| 2895 | Do | 10.10 | 5.84 | 23.87 | 10.76 | 48.05 | 1.38 | 6.5 | 26.5 | 11.9 | 53.5 | 1.6 | Conn. State Ex. Sta. Rep., 1888, p. 32 | 2895 |
| | Average all complete analyses | **10.23** | **5.72** | **23.18** | **10.73** | **48.46** | **1.68** | **6.3** | **25.8** | **11.8** | **54.2** | **1.9** | | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Brewers' grain, wet: | | | | | | | | | | | | | |
| 2896 | No particulars given | 78.50 | 1.07 | 4.69 | 3.11 | 12.63 | | 5.0 | 21.8 | 14.5 | 58.7 | | Conn. Bd. Agr. Rep., 1872, p. 423 | 2896 |
| 2897 | One bushel weighs 70 pounds | 75.24 | 0.29 | 5.94 | 3.87 | 13.19 | 1.47 | 1.2 | 24.1 | 15.6 | 53.2 | 5.9 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 38. | 2897 |
| 2898 | No particulars given | 76.40 | 0.87 | 5.56 | 3.43 | 11.86 | 1.88 | 3.7 | 23.6 | 14.5 | 50.2 | 8.0 | N. J. Ex. Sta. Rep., 1880, p. 46 | 2898 |
| 2899 | Do | 76.23 | 0.92 | 5.56 | 3.55 | 11.68 | 2.06 | 3.9 | 23.6 | 14.9 | 48.8 | 8.8 | do | 2899 |
| 2900 | Do | 78.21 | 1.36 | 4.79 | 3.20 | 11.65 | 0.79 | 6.3 | 22.0 | 14.7 | 53.4 | 3.6 | Conn. State Ex. Sta. Rep., 1881, p. 85 | 2900 |
| 2901 | Do | 68.64 | 1.51 | 7.75 | 4.99 | 14.17 | 2.94 | 4.8 | 24.7 | 15.9 | 45.3 | 9.3 | N. J. Ex. Sta. Rep., 1881, p. 53 | 2901 |
| 2902 | Do | 75.50 | 0.97 | 6.19 | 5.58 | 10.11 | 1.65 | 4.0 | 25.1 | 22.5 | 41.5 | 6.9 | do | 2902 |
| 2903 | Do | 71.54 | 1.16 | 6.30 | 3.10 | 15.73 | 2.18 | 4.1 | 22.1 | 10.9 | 55.2 | 7.7 | N. J. Ex. Sta. Rep., 1883, p. 74 | 2903 |
| 2904 | Do | 75.27 | 0.86 | 5.65 | 3.16 | 13.37 | 1.70 | 3.5 | 22.9 | 12.8 | 53.9 | 6.9 | N. J. Ex. Sta. Rep., 1884, p. 107 | 2904 |
| 2905 | Do. *b* | 68.60 | 1.51 | 6.88 | 4.23 | 15.94 | 2.84 | 5.1 | 21.9 | 13.5 | 50.5 | 9.0 | do | 2905 |
| 2906 | Do | 74.98 | 0.87 | 5.18 | 3.53 | 14.13 | 1.31 | 3.5 | 20.7 | 14.1 | 56.5 | 5.2 | N. Y. State Ex. Sta. Rep., 1884, p. 332 | 2906 |
| 2907 | Do | 79.41 | 0.76 | 4.27 | 3.05 | 11.67 | 0.84 | 3.7 | 20.7 | 14.8 | 56.7 | 4.1 | do | 2907 |
| 2908 | Do | 76.54 | 0.98 | 4.44 | 4.00 | 12.60 | 1.35 | 4.2 | 18.9 | 17.4 | 53.7 | 5.8 | do | 2908 |
| 2909 | Do | 76.92 | 1.13 | 5.33 | 4.17 | 11.06 | 1.39 | 4.9 | 23.1 | 18.0 | 48.0 | 6.0 | do | 2909 |
| 2910 | Do | 76.21 | 0.96 | 4.83 | 4.38 | 12.21 | 1.41 | 4.0 | 20.3 | 18.4 | 51.4 | 5.9 | do | 2910 |
| 2911 | Do | 75.57 | 0.95 | 4.89 | 3.74 | 13.41 | 1.44 | 3.9 | 20.0 | 15.3 | 54.9 | 5.9 | do | 2911 |
| 2912 | Do | 78.34 | 0.95 | 5.74 | 4.17 | 9.57 | 1.43 | 4.4 | 26.6 | 19.2 | 43.2 | 6.6 | Vt. Ex. Sta. Rep., 1888, p. 76 | 2912 |
| | All complete analyses: Maximum | 79.41 | 1.51 | 6.88 | 5.58 | 15.94 | 2.94 | 6.3 | 26.6 | 22.5 | 56.7 | 9.3 | | |
| | All complete analyses: Minimum | 68.60 | 0.29 | 4.27 | 3.05 | 9.57 | 0.79 | 1.2 | 18.9 | 10.9 | 41.5 | 3.6 | | |
| | All complete analyses: Average | **75.66** | **0.96** | **5.44** | **3.82** | **12.54** | **1.58** | **3.9** | **22.4** | **15.7** | **51.5** | **6.5** | | |
| 2913 | Brewers' grains, dried | 6.23 | 3.31 | 19.25 | 10.24 | 56.80 | 4.17 | 3.5 | 20.5 | 10.9 | 60.7 | 4.4 | Conn. State Ex. Sta. Rep., 1883, p. 86 | 2913 |
| 2914 | Do | 11.91 | 3.63 | 20.25 | 11.60 | 46.10 | 6.51 | 4.1 | 23.0 | 13.2 | 52.3 | 7.4 | do | 2914 |
| 2915 | Do | 6.43 | 3.82 | 20.19 | 11.20 | 52.35 | 6.01 | 4.3 | 21.6 | 12.0 | 55.7 | 6.4 | N. J. Ex. Sta. Rep., 1883, p. 74 | 2915 |
| 2916 | Do | 9.52 | 16.25 | 13.76 | 15.21 | 39.40 | 5.86 | 18.0 | 15.2 | 16.8 | 53.5 | 6.5 | Wis. Ex. Sta. Rep., 1888, p. 141 | 2916 |
| | Average, excluding No. 2916 | **8.19** | **3.59** | **19.90** | **11.01** | **51.75** | **5.56** | **3.9** | **21.7** | **12.0** | **56.3** | **6.1** | | |
| 2917 | Brewers' grains, kiln dried | 2.57 | 3.97 | 20.38 | 11.79 | 54.89 | 6.40 | 4.0 | 20.9 | 12.1 | 56.4 | 6.6 | Conn. State Ex. Sta. Rep., 1880, p. 88 | 2917 |
| 2918 | Spent brewers' grains *c* | 6.98 | 5.72 | 19.06 | 14.79 | 51.64 | 1.81 | 6.1 | 20.5 | 15.9 | 55.5 | 2.0 | Mass. State Ex. Sta. Rep., 1888, p. 92 | 2918 |
| | BY-PRODUCTS FROM RYE. | | | | | | | | | | | | | |
| 2919 | Rye bran | 12.88 | 2.89 | 12.58 | 2.54 | 66.96 | 2.15 | 3.3 | 14.4 | 2.9 | 76.9 | 2.5 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 27. | 2919 |
| 2920 | Do | 10.30 | 3.54 | 16.81 | 4.07 | 62.68 | 2.60 | 4.0 | 18.7 | 4.5 | 69.9 | 2.9 | Conn. State Ex. Sta. Rep., 1878, p. 75 | 2920 |
| 2921 | Do | 13.70 | 4.46 | 16.38 | 3.92 | 59.75 | 1.79 | 5.2 | 19.0 | 4.5 | 69.2 | 2.1 | Mass. State Ex. Sta. Rep., 1883, p. 82 | 2921 |
| 2922 | Do | 12.31 | 4.35 | 16.06 | 4.09 | 60.15 | 3.04 | 5.0 | 18.3 | 4.7 | 68.6 | 3.4 | Conn. State Ex. Sta. Rep., 1885, p. 42 | 2922 |
| 2923 | Do. *b* | 13.26 | 2.34 | 12.81 | 69.54 | | 2.02 | 2.7 | 14.6 | 80.4 | | 2.3 | N. J. Ex. Sta. Rep., 1885, p. 170 | 2923 |
| 2924 | Rye bran, old process *b* | 10.62 | 2.61 | 12.94 | 72.13 | | 1.70 | 2.9 | 14.5 | 80.7 | | 1.9 | do | 2924 |
| 2925 | Rye bran *b* | 13.74 | 3.66 | 13.63 | 65.09 | | 3.85 | 4.3 | 15.7 | 75.5 | | 4.5 | do | 2925 |
| 2926 | Do. *b* | 12.39 | 3.11 | 13.31 | 68.23 | | 2.96 | 3.5 | 15.1 | 78.0 | | 3.4 | do | 2926 |
| 2927 | Do. *b* | 11.68 | 3.06 | 14.38 | 68.28 | | 2.60 | 3.4 | 16.3 | 77.4 | | 2.9 | do | 2927 |
| 2928 | Do | 8.18 | 3.15 | 15.16 | 3.18 | 67.55 | 2.78 | 3.4 | 16.5 | **3.5** | **73.6** | 3.0 | Mass. State Ex. Sta. Rep., 1886, p. 40 | 2928 |

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **BY-PRODUCTS AND WASTE MATERIALS—Continued.** | | | | | | | | | | | | | |
| | **BY-PRODUCTS FROM RYE—continued.** | % | % | % | % | % | % | % | % | % | % | % | | |
| 2929 | Rye bran *c* | 12.54 | 3.5? | 11.50 | 3.24 | 64.30 | 4.90 | 4.0 | 13.2 | 3.7 | 73.5 | 5.6 | Mass. State Ex. Sta. Rep., 1887, p. 33. | 2929 |
| 2930 | Do | 11.60 | 3.20 | 14.70 | 3.30 | 64.80 | 2.40 | 3.6 | 16.5 | 3.7 | 73.5 | 2.7 | Guelph Agr. Col. Bul. 14, 1887, p. 6 | 2930 |
| | All complete analyses.. Maximum | 13.70 | 4.46 | 16.81 | 4.09 | 67.55 | 4.90 | 5.2 | 19.0 | 4.7 | 76.9 | 5.6 | | |
| | All complete analyses.. Minimum | 8.18 | 2.89 | 11.50 | 2.54 | 59.75 | 1.79 | 3.3 | 13.2 | 2.9 | 68.6 | 2.1 | | |
| | All complete analyses.. Average | **11.64** | **3.59** | **14.74** | **3.48** | **63.74** | **2.81** | **4.1** | **16.6** | **4.0** | **72.1** | **3.2** | | |
| 2931 | Rye feed, middlings *b* | ..... | 1.37 | 10.56 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | N. J. Ex. Sta. Rep., 1885, p. 170 | 2931 |
| 2932 | Rye feed | 12.77 | 2.62 | 13.56 | 2.75 | 65.70 | 2.60 | 3.0 | 15.5 | 3.2 | 75.3 | 3.0 | Conn. State Ex. Sta. Rep., 1888, p. 151 | 2932 |
| | **BY-PRODUCTS FROM WHEAT.** | | | | | | | | | | | | | |
| 2933 | Wheat bran, from spring wheat | 11.00 | 5.66 | 14.31 | 9.54 | 54.83 | 4.66 | 6.4 | 16.0 | 10.8 | 61.6 | 5.2 | N. J. Ex. Sta. Rep., 1881, p. 53 | 2933 |
| 2934 | Do | 13.57 | 5.72 | 14.93 | 8.94 | 52.47 | 4.37 | 6.7 | 17.3 | 10.3 | 60.7 | 5.0 | Conn. State Ex. Sta. Rep., 1885, p. 36 | 2934 |
| 2935 | Do | 12.27 | 5.57 | 15.44 | 7.89 | 54.64 | 4.19 | 6.3 | 17.6 | 9.0 | 62.3 | 4.8 | do | 2935 |
| 2936 | Do | 12.31 | 5.98 | 15.12 | 10.12 | 52.08 | 4.39 | 6.8 | 17.2 | 11.5 | 59.5 | 5.0 | do | 2936 |
| 2937 | Do | 7.38 | 5.90 | 16.69 | 7.44 | 58.12 | 4.47 | 6.4 | 18.0 | 8.0 | 62.8 | 4.8 | do | 2937 |
| 2938 | Do | 11.30 | 5.90 | 15.30 | 8.80 | 54.40 | 4.30 | 6.7 | 17.2 | 10.0 | 61.3 | 4.8 | Ontario Agr. Col. Bul. 14, 1887 | 2938 |
| 2939 | Do | 10.77 | 6.03 | 17.12 | 9.35 | 51.68 | 5.03 | 6.7 | 19.2 | 10.5 | 58.0 | 5.6 | Conn. State Ex. Sta. Rep., 1888, p. 149 | 2939 |
| 2940 | Do | 12.22 | 5.07 | 16.06 | 6.67 | 56.36 | 3.62 | 5.8 | 18.3 | 7.6 | 64.2 | 4.1 | do | 2940 |
| 2941 | Do | 11.64 | 3.99 | 18.06 | 5.39 | 56.13 | 4.79 | 4.5 | 20.5 | 6.1 | 63.5 | 5.4 | do | 2941 |
| 2942 | Do | 12.20 | 4.32 | 17.75 | 5.48 | 55.40 | 4.85 | 4.9 | 20.2 | 6.3 | 63.0 | 5.6 | do | 2942 |
| | Maximum | 13.57 | 6.03 | 18.06 | 10.12 | 58.12 | 5.03 | 6.8 | 20.5 | 10.8 | 64.2 | 5.6 | | |
| | Minimum | 7.38 | 3.99 | 14.31 | 5.39 | 51.68 | 3.62 | 4.5 | 16.0 | 6.1 | 58.0 | 4.1 | | |
| | Average | **11.47** | **5.41** | **16.08** | **7.96** | **54.61** | **4.47** | **6.1** | **18.2** | **9.0** | **61.6** | **5.1** | | |
| 2943 | Wheat bran, from winter wheat | 10.64 | 6.08 | 16.31 | 8.67 | 54.42 | 3.88 | 6.8 | 18.2 | 9.7 | 60.9 | 4.4 | N. J. Ex. Sta. Rep., 1881, p. 53 | 2943 |
| 2944 | Do | 10.62 | 6.15 | 15.63 | 7.55 | 56.22 | 3.83 | 6.8 | 17.5 | 8.5 | 62.9 | 4.3 | do | 2944 |
| 2945 | Do. *b* | 13.35 | 4.98 | 15.94 | 7.33 | 54.14 | 4.26 | 5.8 | 18.5 | 8.5 | 62.3 | 4.9 | N. J. Ex. Sta. Rep., 1882, p. 71 | 2945 |
| 2946 | Do | 13.60 | 5.79 | 13.87 | 7.24 | 55.99 | 3.51 | 6.7 | 16.1 | 8.4 | 64.7 | 4.1 | N. J. Ex. Sta. Rep., 1883, p. 74 | 2946 |
| 2947 | Do | 12.08 | 6.42 | 17.75 | 8.75 | 50.54 | 4.46 | 7.3 | 20.2 | 9.9 | 57.5 | 5.1 | Conn. State Ex. Sta. Rep., 1885, p. 36 | 2947 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2948 | Do | 13.35 | 6.01 | 16.50 | 8.93 | 51.15 | 4.06 | 6.9 | 19.0 | 10.3 | 59.1 | 4.7 | do | 2948 |
| 2949 | Do | 12.30 | 5.90 | 16.00 | 8.10 | 53.70 | 4.00 | 6.7 | 18.2 | 9.2 | 61.3 | 4.6 | Ontario Agr. Col. Bul. 14, 1887 | 2949 |
| | Maximum | 13.60 | 6.42 | 17.75 | 8.93 | 56.22 | 4.46 | 7.3 | 20.2 | 10.3 | 64.7 | 5.1 | | |
| | Minimum | 10.62 | 4.98 | 13.87 | 7.24 | 50.54 | 3.51 | 5.8 | 16.1 | 8.4 | 57.5 | 4.1 | | |
| | Average | **12.28** | **5.90** | **16.00** | **8.08** | **53.74** | **4.00** | **6.7** | **18.2** | **9.2** | **61.3** | **4.6** | | |
| | Wheat bran, unclassified: | | | | | | | | | | | | | |
| 2950 | Coarse wheat feed from white wheat | 10.87 | 5.75 | 13.63 | 7.56 | 58.92 | 3.27 | 6.5 | 15.3 | 8.5 | 66.1 | 3.6 | Conn. State Ex. Sta. Rep., 1877, p. 59 | 2950 |
| 2951 | Coarse wheat feed from red wheat | 11.14 | 5.99 | 12.13 | 9.31 | 58.36 | 3.07 | 6.7 | 13.7 | 10.4 | 65.7 | 3.5 | do | 2951 |
| 2952 | Western wheat bran | 12.12 | 6.33 | 13.50 | 8.79 | 55.90 | 3.36 | 7.2 | 15.4 | 10.1 | 63.5 | 3.8 | do | 2952 |
| 2953 | Fine feed (ground bran) | 10.47 | 5.56 | 15.88 | 7.98 | 58.88 | 3.23 | 6.2 | 15.5 | 8.9 | 65.8 | 3.6 | do | 2953 |
| 2954 | Not described | 11.65 | 5.63 | 14.00 | 9.13 | 55.56 | 4.03 | 6.4 | 15.8 | 10.3 | 62.9 | 4.6 | Mich. Bd. Agr. Rep., 1878, p. 410 | 2954 |
| 2955 | Western bran | 10.88 | 5.90 | 16.06 | 7.99 | 55.12 | 4.05 | 6.6 | 18.1 | 9.0 | 61.8 | 4.5 | N. J. Ex. Sta. Rep., 1880, p. 47 | 2955 |
| 2956 | Not described *a* | 8.65 | 6.15 | 16.27 | 5.90 | 57.43 | 5.60 | 6.8 | 17.8 | 6.5 | 62.8 | 6.1 | U. S. Dept. Agr. Rep., 1880, p. 169 | 2956 |
| 2957 | Do | 12.21 | 4.15 | 16.74 | 7.81 | 56.19 | 3.00 | 4.7 | 19.0 | 8.9 | 64.0 | 3.4 | U. S. Census, 1880, vol. III, p. 37 | 2957 |
| 2958 | Do | 13.56 | 6.15 | 16.56 | 8.22 | 51.56 | 3.95 | 7.1 | 19.2 | 9.5 | 59.6 | 4.6 | Conn. State Ex. Sta. Rep., 1881, p. 85 | 2958 |
| 2959 | Do | 13.94 | 5.52 | 14.89 | 7.31 | 55.95 | 2.39 | 6.4 | 17.3 | 8.5 | 65.1 | 2.7 | do | 2959 |
| 2960 | Do | 12.53 | 4.93 | 14.94 | 7.34 | 56.19 | 4.07 | 5.6 | 17.1 | 8.4 | 64.3 | 4.6 | N. J. Ex. Sta. Rep., 1881, p. 53 | 2960 |
| 2961 | Southern bran | 12.58 | 6.34 | 16.81 | 8.49 | 53.42 | 2.35 | 7.3 | 19.1 | 9.7 | 61.2 | 2.7 | do | 2961 |
| 2962 | Not described *a* | 11.10 | 6.30 | 16.25 | 10.10 | 50.41 | 5.84 | 7.1 | 18.3 | 11.3 | 56.8 | 6.5 | U. S. Dept. Agr. Rep., 1881–'82, p. 553 | 2962 |
| 2963 | Do | 11.60 | 6.30 | 14.00 | 8.40 | 56.80 | 2.90 | 7.1 | 15.8 | 9.5 | 64.3 | 3.3 | Agr. of Me., 1882, p. 302 | 2963 |
| 2964 | Do | 13.70 | 5.83 | 16.88 | 8.05 | 53.03 | 2.51 | 6.7 | 19.6 | 9.3 | 61.5 | 2.9 | Mass. State Ex. Sta. Rep., 1883, p. 82 | 2964 |
| 2965 | Do | 14.18 | 5.97 | 12.69 | 7.69 | 56.21 | 3.26 | 7.0 | 14.8 | 8.9 | 65.5 | 3.8 | Conn. State Ex. Sta. Rep., 1883, p. 87 | 2965 |
| 2966 | Do | 12.08 | 6.96 | 13.77 | 12.07 | 51.77 | 3.35 | 7.9 | 15.7 | 13.7 | 58.9 | 3.8 | Mass. State Ex. Sta. Rep., 1883, p. 83 | 2966 |
| 2967 | Do | 10.48 | 6.26 | 18.12 | 9.13 | 51.75 | 4.26 | 7.0 | 20.2 | 10.2 | 57.3 | 4.8 | Mass. State Ex. Sta. Rep., 1884, p. 58 | 2967 |
| 2968 | Contained corn cockle (*Lychnis githago*) and black bindweed (*Polygonum convolvulus*). | 11.90 | 6.33 | 14.68 | 63.88 | | 3.71 | 7.2 | 16.7 | 71.9 | | 4.2 | Conn. State Ex. Sta. Rep., 1884, p. 109 | 2968 |
| 2969 | Not described | 13.72 | 6.12 | 13.69 | 10.52 | 53.09 | 2.86 | 7.1 | 15.9 | 12.2 | 61.5 | 3.3 | N. Y. State Ex. Sta. Rep., 1884, p. 332 | 2969 |
| 2970 | Do | 14.24 | 5.69 | 15.33 | 7.53 | 54.26 | 2.95 | 6.6 | 17.8 | 8.7 | 63.4 | 3.5 | do | 2970 |
| 2971 | Do | 14.13 | 5.26 | 14.64 | 7.87 | 55.25 | 2.85 | 6.2 | 16.9 | 9.2 | 64.3 | 3.4 | do | 2971 |
| 2972 | Do | 14.28 | 5.02 | 14.89 | 7.50 | 55.63 | 2.68 | 5.8 | 17.2 | 8.7 | 65.1 | 3.2 | do | 2972 |
| 2973 | Do | 12.05 | 5.82 | 15.69 | 10.10 | 52.18 | 4.16 | 6.6 | 17.9 | 11.5 | 59.2 | 4.8 | Mass. State Ex. Sta. Rep., 1885, p. 22 | 2973 |
| 2974 | Do | 15.83 | 5.43 | 13.99 | 13.14 | 50.11 | 1.50 | 6.4 | 16.6 | 15.6 | 59.6 | 1.8 | N. Y. Ex. Sta. Rep., 1885, p. 306 | 2974 |
| 2975 | Do | 12.62 | 5.58 | 14.91 | 15.50 | 45.53 | 5.86 | 6.4 | 17.1 | 17.7 | 52.1 | 6.7 | do | 2975 |
| 2976 | Do | 13.36 | 5.26 | 13.81 | 14.82 | 50.38 | 2.37 | 6.1 | 15.9 | 17.1 | 58.2 | 2.7 | do | 2976 |
| 2977 | Western bran *b* | 11.23 | 7.70 | 12.31 | 63.72 | | 5.04 | 8.7 | 13.8 | 71.9 | | 5.6 | N. J. Ex. Sta. Rep., 1885, p. 166 | 2977 |
| 2978 | Do. *b* | 12.22 | 6.36 | 14.31 | 63.04 | | 4.07 | 7.3 | 16.2 | 71.8 | | 4.7 | do | 2978 |
| 2979 | Do. *b* | 12.32 | 5.84 | 16.00 | 62.44 | | 3.40 | 6.6 | 18.2 | 71.3 | | 3.9 | do | 2979 |
| 2980 | Do. *b* | 11.80 | 6.83 | 14.81 | 63.60 | | 2.96 | 7.7 | 16.8 | 72.1 | | 3.4 | do | 2980 |
| 2981 | Do. *b* | 12.90 | 7.03 | 14.69 | 61.93 | | 3.45 | 8.0 | 16.8 | 71.2 | | 4.0 | do | 2981 |
| 2982 | Do. *b* | 12.10 | 6.73 | 14.94 | 62.69 | | 3.54 | 8.0 | 17.1 | 70.9 | | 4.0 | do | 2982 |
| 2983 | Old-process bran *b* | 11.20 | 5.99 | 14.81 | 63.75 | | 4.25 | 6.8 | 16.6 | 71.8 | | 4.8 | do | 2983 |
| 2984 | Do. *b* | 11.63 | 6.50 | 14.19 | 64.74 | | 2.94 | 7.3 | 16.0 | 73.4 | | 3.3 | do | 2984 |
| 2985 | Do. *b* | 13.10 | 4.01 | 17.31 | 62.74 | | 2.84 | 4.6 | 20.3 | 71.9 | | 3.2 | do | 2985 |
| 2986 | New-process bran (coarse) *b* | 11.42 | 5.98 | 16.06 | 63.62 | | 2.92 | 6.8 | 18.2 | 71.7 | | 3.3 | do | 2986 |
| 2987 | New-process bran (fine) *b* | 12.39 | 4.77 | 17.94 | 60.45 | | 4.45 | 5.5 | 20.5 | 68.9 | | 5.1 | do | 2987 |
| 2988 | New-process bran *b* | 12.05 | 6.36 | 15.50 | 62.36 | | 3.73 | 7.3 | 17.5 | 71.0 | | 4.2 | do | 2988 |
| 2989 | Not described *b* | 13.72 | 6.13 | 15.56 | 61.07 | | 3.52 | 7.1 | 18.0 | 70.8 | | 4.1 | do | 2989 |

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | BY-PRODUCTS AND WASTE MATERIALS—Continued. | | | | | | | | | | | | | |
| | BY-PRODUCTS FROM WHEAT—continued. | | | | | | | | | | | | | |
| | Wheat bran, unclassified—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 2990 | Not described *b* | 10.90 | 6.31 | 15.31 | | 63.86 | 3.62 | 7.1 | 16.9 | | 72.0 | 4.0 | N. J. Ex. Sta. Rep., 1885, 166 | 2990 |
| 2991 | Do. *b* | 12.20 | 7.78 | 14.00 | | 64.17 | 1.85 | 8.9 | 15.9 | | 73.9 | 2.2 | do | 2991 |
| 2992 | Do. *b* | 11.95 | 5.65 | 15.19 | | 64.76 | 2.45 | 6.5 | 17.2 | | 73.5 | 2.8 | do | 2992 |
| 2993 | Do. *b* | 12.05 | 5.79 | 13.44 | | 66.28 | 2.44 | 6.6 | 15.2 | | 75.5 | 2.7 | do | 2993 |
| 2994 | Old process, Southern *b* | 12.59 | 5.66 | 14.95 | | 63.83 | 2.98 | 6.5 | 17.2 | | 72.9 | 3.4 | do | 2994 |
| 2995 | Not described | 11.41 | 6.35 | 15.50 | 8.88 | 53.87 | 3.99 | 7.2 | 17.4 | 10.0 | 60.8 | 4.6 | Conn. State Ex. Sta. Rep., 1885, p. 36 | 2995 |
| 2996 | Do | 13.20 | 6.15 | 15.56 | 9.83 | 50.96 | 4.30 | 7.1 | 17.9 | 11.3 | 58.7 | 5.0 | do | 2996 |
| 2997 | Fine feed | 11.98 | 4.05 | 16.06 | 5.14 | 58.39 | 4.38 | 4.6 | 18.2 | 5.8 | 66.4 | 5.0 | do | 2997 |
| 2998 | Do | 12.17 | 4.50 | 16.20 | 5.63 | 57.17 | 4.33 | 5.1 | 18.4 | 6.4 | 65.2 | 4.9 | do | 2998 |
| 2999 | Do | 12.89 | 4.16 | 15.44 | 5.75 | 57.55 | 4.21 | 4.8 | 17.7 | 6.6 | 66.1 | 4.8 | do | 2999 |
| 3000 | Do | 12.82 | 2.50 | 15.81 | 2.35 | 63.15 | 3.37 | 2.9 | 18.1 | 2.7 | 72.4 | 3.9 | do | 3000 |
| 3001 | Roller bran, from Pillsbury Mills, Minneapolis. | 13.68 | 5.29 | 14.69 | 11.77 | 51.03 | 3.54 | 6.1 | 17.0 | 13.6 | 59.2 | 4.1 | Wis. Ex. Sta. Rep., 1886, p. 87 | 3001 |
| 3002 | Do | 13.37 | 5.14 | 14.63 | 12.75 | 50.51 | 3.60 | 5.9 | 16.9 | 14.7 | 58.3 | 4.2 | Wis. Ex. Sta. Rep., 1886, p. 95 | 3002 |
| 3003 | Do | 14.00 | 5.43 | 14.75 | 10.80 | 51.56 | 3.46 | 6.3 | 17.2 | 12.6 | 59.9 | 4.0 | do | 3003 |
| 3004 | Roller bran, from Washburn Mills, Minneapolis, bought in autumn. | 14.13 | 6.05 | 15.19 | 10.31 | 50.96 | 3.36 | 6.1 | 17.7 | 12.0 | 59.3 | 3.9 | Wis. Ex. Sta. Rep., 1886, p. 87 | 3004 |
| 3005 | Roller bran, from Washburn Mills, Minneapolis. | 14.61 | 6.64 | 14.88 | 10.24 | 49.71 | 3.92 | 7.7 | 17.4 | 11.9 | 58.4 | 4.6 | Wis. Ex. Sta. Rep., 1886, p. 99 | 3005 |
| 3006 | Not described | 10.00 | 5.49 | 16.77 | 6.84 | 55.43 | 5.47 | 6.1 | 18.6 | 7.6 | 61.6 | 6.1 | Mass. State Ex. Sta. Rep., 1886, p. 38 | 3006 |
| 3007 | Do | 9.27 | 6.57 | 16.05 | 12.26 | 52.11 | 3.74 | 7.2 | 17.7 | 13.5 | 57.5 | 4.1 | N. Y. State Ex. Sta. Rep., 1886, p. 366 | 3007 |
| 3008 | Do | 12.48 | 6.60 | 15.06 | 8.48 | 53.20 | 4.18 | 7.5 | 17.2 | 9.6 | 60.9 | 4.8 | Conn. State Ex. Sta. Rep., 1886, p. 113 | 3008 |
| 3009 | Do | 12.28 | 6.14 | 13.20 | 9.24 | 54.84 | 4.30 | 6.9 | 15.0 | 10.5 | 62.7 | 4.9 | Ontario Agr. Col. Bul. 14, 1887, p. 5 | 3009 |
| 3010 | Do | 14.30 | 6.13 | 12.75 | 11.83 | 51.49 | 3.50 | 7.1 | 14.8 | 13.6 | 60.4 | 4.1 | do | 3010 |
| 3011 | Do | 13.00 | 6.00 | 14.50 | 9.40 | 53.60 | 3.50 | 6.9 | 16.6 | 10.8 | 61.7 | 4.0 | do | 3011 |
| 3012 | Coarse bran | 11.40 | 5.10 | 12.90 | 8.10 | 59.00 | 3.50 | 5.8 | 14.6 | 9.1 | 66.5 | 4.0 | do | 3012 |
| 3013 | Not described | 10.87 | 5.26 | 17.50 | 7.37 | 55.08 | 3.92 | 5.9 | 19.6 | 8.3 | 61.8 | 4.4 | Mass. State Ex. Sta. Rep., 1887, p. 32 | 3013 |
| 3014 | Do | 11.14 | 5.86 | 15.75 | 11.37 | 50.55 | 5.33 | 6.6 | 17.7 | 12.8 | 56.9 | 6.0 | Mass. State Ex. Sta. Rep., 1887, p. 52 | 3014 |
| 3015 | Do | 10.38 | 6.20 | 14.56 | 12.78 | 51.77 | 4.31 | 6.9 | 16.3 | 14.3 | 57.7 | 4.8 | Mass. State Ex. Sta. Rep., 1887, p. 103 | 3015 |
| 3016 | Do. *c* | 12.20 | 6.44 | 17.37 | 9.59 | 51.94 | 2.46 | 7.3 | 19.8 | 10.9 | 59.2 | 2.8 | do | 3016 |
| 3017 | Do | 10.49 | 5.67 | 16.62 | 7.93 | 52.79 | 6.50 | 6.3 | 18.6 | 8.9 | 58.9 | 7.3 | Vt. Ex. Sta. Rep., 1887, p. 134 | 3017 |
| 3018 | Do | 8.58 | 7.08 | 18.87 | 10.55 | 47.87 | 6.95 | 7.7 | 20.6 | 11.5 | 52.6 | 7.6 | Vt. Ex. Sta. Rep., 1887, p. 137 | 3018 |
| 3019 | Do | 10.87 | 6.55 | 15.12 | 9.25 | 53 66 | 4.55 | 7.3 | 17.0 | 10.4 | 00.2 | 5.1 | Mass. Ex. Sta. Rep., 1888, p. 49 | 3019 |
| 3020 | Do | 12.50 | 5.95 | 15.57 | 9.36 | 51.82 | 4.80 | 6.8 | 17.8 | 10.7 | 59.2 | 5.5 | Mass. Ex. Sta. Rep., 1888, p. 82 | 3020 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3021 | Do. *c* | 9.43 | 5.68 | 15.18 | 11.76 | 54.00 | 3.95 | 6.3 | 16.8 | 13.0 | 59.5 | 4.4 | Mass. Ex. Sta. Rep., 1888, p. 87 | 3021 |
| 3022 | Do | 9.25 | 7.17 | 14.63 | 9.12 | 55.54 | 4.29 | 7.9 | 16.1 | 10.1 | 61.2 | 4.7 | Mass. Ex. Sta. Rep., 1888, p. 88 | 3022 |
| 3023 | Do | 9.89 | 6.54 | 16.37 | 13.34 | 48.16 | 5.70 | 7.3 | 18.2 | 14.8 | 54.5 | 5.2 | Mass. Ex. Sta. Rep., 1888, p. 89 | 3023 |
| 3024 | Do | 13.17 | 7.29 | 14.65 | 8.20 | 52.89 | 3.80 | 8.4 | 16.8 | 9.4 | 61.0 | 4.4 | Ark. Ex. Sta. Rep., 1888, p. 133 | 3024 |
| 3025 | Do. *a* | 12.50 | 6.03 | 17.02 | 10.25 | 49.94 | 4.26 | 6.9 | 19.5 | 11.7 | 57.0 | 4.9 | Wis. Ex. Sta. Rep., 1888, p. 31 | 3025 |
| 3026 | Do | 9.97 | 6.04 | 15.75 | 9.56 | 51.64 | 7.04 | 6.7 | 17.5 | 10.6 | 56.4 | 7.8 | Vt. Ex. Sta. Rep., 1888, p. 76 | 3026 |
| 3027 | Do | 14.27 | 5.71 | 17.14 | 8.52 | 50.33 | 4.03 | 6.7 | 20.0 | 9.9 | 58.7 | 4.7 | N. Y. Ex. Sta. Rep., p. 39 | 3027 |
| 3028 | Do | 14.33 | 5.40 | 15.15 | 8.51 | 53.41 | 3.20 | 6.3 | 17.7 | 9.9 | 62.4 | 3.7 | do | 3028 |
| 3029 | Do | 9.39 | 4.84 | 16.60 | 4.10 | 59.72 | 5.35 | 5.3 | 18.3 | 4.5 | 65.9 | 6.0 | Colo. Ex. Sta. Bul. 8, 1889 | 3029 |
| 3030 | Do. *a* | 14.55 | 5.30 | 14.00 | 7.78 | 54.61 | 3.76 | 6.2 | 16.4 | 9.1 | 63.9 | 4.4 | Wis. Ex. Sta. Rep., 1889, p. 73 | 3030 |
| 3031 | Do | 10.08 | 5.75 | 15.92 | 9.62 | 54.77 | 3.86 | 6.4 | 17.7 | 10.7 | 60.9 | 4.3 | Mass. State Ex. Sta. Rep., 1889, p. 31 | 3031 |
| 3032 | Do | 9.57 | 5.33 | 15.43 | 9.11 | 56.24 | 4.32 | 5.9 | 17.1 | 10.0 | 62.2 | 4.8 | Mass. State Ex. Sta. Rep., 1889, p. 129 | 3032 |
| 3033 | Do | 11.34 | 5.81 | 16.08 | 9.96 | 52.70 | 4.11 | 6.6 | 18.1 | 11.3 | 59.4 | 4.6 | do | 3033 |
| 3034 | Do | 9.34 | 6.05 | 16.44 | 9.87 | 55.05 | 3.25 | 6.7 | 18.1 | 10.9 | 60.7 | 3.6 | Mass. State Ex. Sta. Rep., 1889, p. 130 | 3034 |
| 3035 | Do | 10.41 | 6.26 | 15.25 | 10.77 | 52.42 | 4.89 | 7.0 | 17.0 | 12.0 | 58.5 | 5.5 | do | 3035 |
| 3036 | Do | 11.42 | 6.20 | 15.33 | 9.77 | 52.50 | 4.78 | 7.0 | 17.3 | 11.0 | 59.3 | 5.4 | Mass. State Ex. Sta. Rep., 1889, p. 131 | 3036 |
| 3037 | Do | 8.85 | 6.87 | 15.00 | 8.78 | 55.80 | 4.70 | 7.5 | 16.5 | 9.6 | 61.2 | 5.2 | do | 3037 |
| 3038 | Do | 8.10 | 6.33 | 15.36 | 9.86 | 55.39 | 4.96 | 6.9 | 16.7 | 10.7 | 60.3 | 5.4 | Mass. State Ex. Sta. Rep., 1889, p. 132 | 3038 |
| | All complete analyses of wheat bran. Maximum | 15.83 | 7.29 | 18.87 | 15.50 | 63.15 | 7.04 | 8.4 | 20.6 | 17.7 | 72.4 | 7.8 | | |
| | All complete analyses of wheat bran. Minimum | 7.38 | 2.50 | 12.13 | 2.35 | 45.53 | 1.50 | 2.9 | 13.7 | 2.7 | 52.1 | 1.8 | | |
| | All complete analyses of wheat bran. Average | **11.91** | **5.78** | **15.42** | **8.99** | **53.87** | **4.03** | **6.6** | **17.4** | **10.2** | **61.3** | **4.5** | | |
| | Wheat middlings: | | | | | | | | | | | | | |
| 3039 | St. Louis middlings | 12.08 | 1.57 | 11.06 | 3.57 | 69.21 | 2.51 | 1.8 | 12.6 | 4.0 | 78.7 | 2.9 | Bussey Inst. Bul., 1874, p. 27 | 3039 |
| 3040 | Illinois middlings | 13.30 | 2.71 | 10.13 | 5.37 | 64.78 | 3.71 | 3.1 | 11.7 | 6.2 | 74.7 | 4.3 | do | 3040 |
| 3041 | St. Louis ship stuff | 11.81 | 2.25 | 11.12 | 5.59 | 66.46 | 2.77 | 2.6 | 12.7 | 6.3 | 75.3 | 3.1 | do | 3041 |
| 3042 | Not described | 10.56 | 3.45 | 14.22 | 5.35 | 62.90 | 3.52 | 3.9 | 15.9 | 6.0 | 70.3 | 3.9 | Conn. State Ex. Sta. Rep., 1877, p. 59 | 3042 |
| 3043 | No. 1 middlings | 11.32 | 1.39 | 10.48 | 3.88 | 70.86 | 2.07 | 1.6 | 11.8 | 4.4 | 79.9 | 2.3 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 26. | 3043 |
| 3044 | No. 2 middlings | 12.27 | 4.06 | 13.33 | 7.44 | 60.21 | 2.68 | 4.6 | 15.2 | 8.5 | 68.6 | 3.1 | do | 3044 |
| 3045 | Not described | 11.27 | 2.11 | 13.75 | 3.47 | 65.71 | 3.69 | 2.4 | 15.5 | 3.9 | 74.0 | 4.2 | Mich. Bd. Agr. Rep., 1878, p. 410 | 3045 |
| 3046 | Mill feed | 11.29 | 2.24 | 11.38 | 5.22 | 65.52 | 4.35 | 2.5 | 12.8 | 5.9 | 73.9 | 4.9 | do | 3046 |
| 3047 | Not described | 13.85 | 2.45 | 15.00 | 1.27 | 67.70 | 3.73 | 2.8 | 17.4 | 1.5 | 74.0 | 4.3 | Conn. State Ex. Sta. Rep., 1883, p. 87 | 3047 |
| 3048 | Do | 11.62 | ..... | 14.25 | ..... | ..... | 3.50 | ..... | 16.7 | ..... | ..... | 4.0 | do | 3048 |
| 3049 | Do | 11.35 | ..... | 14.31 | ..... | ..... | 3.98 | ..... | 16.2 | ..... | ..... | 4.5 | do | 3049 |
| 3050 | Fancy middlings | 10.93 | 2.41 | 15.21 | 2.00 | 65.84 | 3.61 | 2.7 | 17.1 | 2.3 | 73.8 | 4.1 | Conn. State Ex. Sta. Rep., 1884, p. 108 | 3050 |
| 3051 | Not described | 9.25 | 4.82 | 16.50 | 7.62 | 55.94 | 5.87 | 5.3 | 18.2 | 8.4 | 62.6 | 6.5 | Mass. State Ex. Sta. Rep., 1885, p. 101 | 3051 |
| 3052 | Do | 13.77 | 3.65 | 12.45 | 4.42 | 60.83 | 4.88 | 4.2 | 14.4 | 5.1 | 70.6 | 5.7 | N. Y. State Ex. Sta. Rep., 1885, p. 306 | 3052 |
| 3053 | Ship stuff | 16.00 | 6.32 | 14.96 | 4.77 | 53.86 | 4.09 | 7.5 | 17.8 | 5.7 | 64.1 | 4.9 | do | 3053 |
| 3054 | Do | 14.17 | 4.44 | 16.63 | 6.30 | 53.74 | 4.72 | 5.2 | 19.4 | 7.3 | 62.6 | 5.5 | do | 3054 |
| 3055 | Not described | 10.23 | 3.58 | 19.18 | 3.28 | 59.16 | 4.57 | 4.0 | 21.3 | 3.6 | 66.0 | 5.1 | Conn. State Ex. Sta. Rep., 1885, p. 36 | 3055 |
| 3056 | From spring wheat | 13.00 | 4.09 | 17.94 | 7.04 | 53.02 | 4.91 | 4.7 | 20.6 | 8.1 | 61.0 | 5.6 | do | 3056 |
| 3057 | Do | 12.73 | 3.75 | 17.63 | 4.31 | 57.38 | 4.20 | 4.3 | 20.2 | 4.9 | 65.8 | 4.8 | do | 3057 |
| 3058 | Do | 13.68 | 2.13 | 18.19 | 1.90 | 60.95 | 3.15 | 2.5 | 21.1 | 2.2 | 70.6 | 3.6 | do | 3058 |
| 3059 | Ship stuff *b* | 9.22 | 3.02 | 16.10 | 12.66 | 54.86 | 4.14 | 3.3 | 17.7 | 13.9 | 60.6 | 4.5 | Mo. Agr. Col. Farm Bul. 14, 1885, p. 4. | 3059 |
| 3060 | Not described, *b* | 12.51 | 1.94 | 14.88 | 67.76 | | 2.91 | 2.2 | 16.9 | 77.6 | | 3.3 | N. J. Ex. Sta. Rep., 1885, p. 168 | 3060 |
| 3061 | Do. *b* | 13.04 | 2.02 | 14.75 | 67.19 | | 3.00 | 2.3 | 16.9 | 77.4 | | 3.4 | do | 3061 |
| 3062 | Do. *b* | 10.80 | 2.10 | 13.62 | 70.96 | | 2.52 | 2.4 | 15.2 | 79.6 | | 2.8 | do | 3062 |
| 3063 | New-process middlings *b* | 12.03 | 2.23 | 14.75 | 67.05 | | 3.94 | 2.5 | 16.7 | 76.4 | | 4.4 | do | 3063 |

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **BY-PRODUCTS AND WASTE MATERIALS—Continued.** | | | | | | | | | | | | | |
| | BY-PRODUCTS FROM WHEAT—continued. | | | | | | | | | | | | | |
| | Wheat middlings—Continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 3064 | Old-process middlings *b* | 13.66 | 2.03 | 13.25 | | 67.81 | 3.25 | 2.3 | 15.4 | | 78.5 | 3.8 | N. J. Ex. Sta. Rep., 1885, p. 168 | 3064 |
| 3065 | Western middlings *b* | 12.33 | 3.32 | 16.00 | | 64.43 | 3.92 | 3.8 | 18.2 | | 73.6 | 4.4 | ....do | 3065 |
| 3066 | Do. *b* | 9.82 | 2.81 | 16.69 | | 67.40 | 3.28 | 3.1 | 18.4 | | 74.8 | 3.7 | ....do | 3066 |
| 3067 | Do. *b* | 12.06 | 4.52 | 16.81 | | 62.88 | 3.73 | 5.1 | 19.0 | | 71.7 | 4.2 | ....do | 3067 |
| 3068 | Do. *b* | 12.75 | 1.61 | 12.94 | | 69.98 | 2.72 | 1.8 | 14.7 | | 80.4 | 3.1 | ....do | 3068 |
| 3069 | Do. *b* | 12.96 | 3.29 | 16.88 | | 63.23 | 3.63 | 3.8 | 19.3 | | 72.8 | 4.1 | ....do | 3069 |
| 3070 | White middlings *b* | 12.37 | 1.68 | 14.00 | | 69.18 | 2.77 | 1.9 | 16.0 | | 78.9 | 3.2 | ....do | 3070 |
| 3071 | Brown middlings *b* | 12.39 | 2.67 | 14.69 | | 66.56 | 3.69 | 3.1 | 16.8 | | 75.9 | 4.2 | ....do | 3071 |
| 3 72 | Flour middlings *b* | 11.43 | 2.24 | 16.13 | | 66.77 | 3.43 | 2.5 | 18.2 | | 75.5 | 3.8 | ....do | 3072 |
| 3073 | Round stuff or middlings *b* | 11.93 | 2.11 | 14.50 | | 68.12 | 3.34 | 2.4 | 16.4 | | 77.5 | 3.7 | ....do | 3073 |
| 3074 | Western wheat feed *b* | 10.66 | 5.28 | 16.00 | | 63.79 | 4.27 | 5.9 | 17.9 | | 71.4 | 4.8 | ....do | 3074 |
| 3075 | Wheat ship stuff *b* | 11.83 | 6.12 | 15.00 | | 64.60 | 2.45 | 6.9 | 17.0 | | 73.3 | 2.8 | ....do | 3075 |
| 3076 | Not described | 10.55 | 2.21 | 17.22 | 1.25 | 64.97 | 3.80 | 2.5 | 19.2 | 1.4 | 72.6 | 4.3 | Mass. State Ex. Sta. Rep., 1886, p. 39. | 3076 |
| 3077 | Do | 9.85 | 2.28 | 15.53 | 2.48 | 66.98 | 2.88 | 2.5 | 17.2 | 2.7 | 74.4 | 3.2 | ....do | 3077 |
| 3078 | Do | 9.44 | 3.75 | 17.99 | 4.70 | 59.90 | 4.22 | 4.1 | 19.9 | 5.2 | 66.1 | 4.7 | N. Y. State Ex. Sta. Rep., 1886, p. 366. | 3078 |
| 3079 | Do | 13.77 | 3.68 | 15 60 | 4.44 | 57.68 | 4.83 | 4.2 | 18.4 | 5.1 | 66.6 | 5.7 | ....do | 3079 |
| 3080 | Ship stuff | 14.17 | 4.44 | 16.63 | 6.30 | 53.74 | 4.72 | 5.2 | 19.4 | 7.3 | 62.6 | 5.5 | ....do | 3080 |
| 3081 | Do | 15.20 | 3.65 | 16.13 | 2.62 | 57.99 | 4.41 | ..... | ..... | ..... | ..... | ..... | Mo. Agr. Col. Farm Bul. 19, 1886, p. 3. | 3081 |
| 3082 | Not described *c* | 9.54 | 4.04 | 17.60 | 5.10 | 58.29 | 5.43 | 4.5 | 19.5 | 5.6 | 64.4 | 6.0 | Mass. State Ex. Sta. Rep., 1887, p. 104. | 3082 |
| 3083 | Do | 11.82 | 3.27 | 17.76 | 3.07 | 59.83 | 4.25 | 3.7 | 20.1 | 3.5 | 67.8 | 4.9 | Mo. Agr. Col. Farm Bul. 27, 1887, p. 6. | 3083 |
| 3084 | Fine middlings | 12.10 | 3.78 | 18.12 | 5.76 | 55.34 | 4.90 | 4.3 | 20.6 | 6.6 | 62.9 | 5.6 | Conn. State Ex. Sta. Rep., 1888, p. 149. | 3084 |
| 3085 | Flour middlings | 12.75 | 2.41 | 18.81 | 1.40 | 60.31 | 4.32 | 2.8 | 21.4 | 1.6 | 69.3 | 4.9 | ....do | 3085 |
| 3086 | Special middlings | 12.45 | 3.87 | 18.50 | 5.08 | 56.60 | 3.50 | 4.5 | 21.1 | 5.7 | 64.7 | 4.0 | ....do | 3086 |
| 3087 | Not described | 12.47 | 3.33 | 19.96 | 3.89 | 57.17 | 3.18 | 3.8 | 22.8 | 4.5 | 65.3 | 0.6 | N. H. Ex. Sta. Bul. 8, 1888 | 3087 |
| 3088 | Do. *b* | 12.43 | 4.08 | 14.71 | 5.64 | 59.84 | 3.30 | 4.2 | 15.1 | 5.8 | 71.5 | 3.4 | Mass. State Ex. Sta. Bul. 37, 1890 | 3088 |
| | All complete analyses: Maximum | 16.00 | 6.32 | 19.96 | 12.66 | 70.86 | 5.87 | 7.5 | 22.8 | 13.9 | 79.9 | 6.5 | | |
| | All complete analyses: Minimum | 9.22 | 1.39 | 10.13 | 1.25 | 53.02 | 2.07 | 1.6 | 11.7 | 1.4 | 60.6 | 2.3 | | |
| | All complete analyses: Average | **12.10** | **3.29** | **15.62** | **4.60** | **60.42** | **3.97** | **3.8** | **17.8** | **5.2** | **68.7** | **4.5** | | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Wheat shorts: | | | | | | | | | | | | | |
| 3089 | St. Louis shorts | 12.23 | 4.53 | 12.06 | 7.12 | 60.05 | 4.01 | 5.2 | 13.7 | 8.1 | 68.4 | 4.6 | Bussey Inst. Bul., 1874, p. 27 | 3089 |
| 3090 | Illinois shorts | 10.96 | 4.24 | 11.13 | 7.29 | 62.32 | 4.06 | 4.8 | 12.5 | 8.2 | 69.9 | 4.6 | do | 3090 |
| 3091 | Michigan shorts | 11.77 | 4.06 | 12.75 | 10.47 | 56.30 | 4.65 | 4.6 | 14.4 | 11.9 | 63.8 | 5.3 | do | 3091 |
| 3092 | Not described | 11.31 | 3.94 | 13.91 | 6.34 | 62.00 | 2.50 | 4.4 | 15.7 | 7.0 | 70.1 | 2.8 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 26. | 3092 |
| 3093 | Do | 11.26 | 3.95 | 15.13 | 7.46 | 57.35 | 4.85 | 4.5 | 17.1 | 8.4 | 64.5 | 5.5 | Mich. Bd. Agr. Rep., 1878, p. 410 | 3093 |
| 3094 | Do | 13.59 | 5.23 | 13.87 | 8.99 | 55.62 | 2.70 | 6.1 | 16.0 | 10.4 | 64.4 | 3.1 | Conn. State Ex. Sta. Rep., 1883, p. 87. | 3094 |
| 3095 | Fine shorts *b* | 12.06 | 1.99 | 13.44 | 69.11 | | 3.40 | 2.3 | 15.2 | 78.6 | | 3.9 | N. J. Ex. Sta. Rep., 1885, p. 168 | 3095 |
| 3096 | Not described | 15.52 | 4.00 | 16.06 | 5.84 | 53.26 | 5.32 | 4.7 | 19.0 | 6.9 | 63.1 | 6.3 | Wis. Ex. Sta. Rep., 1886, p. 96 | 3096 |
| 3097 | Do | 15.33 | 4.07 | 15.69 | 6.10 | 53.74 | 5.07 | 4.8 | 18.5 | 7.2 | 63.5 | 6.0 | do | 3097 |
| 3098 | Do* | 11.80 | 4.30 | 13.10 | 7.90 | 67.00 | 3.70 | | | | | | Ky. Ex. Sta. Bul. 3, 1886, p. 3 | 3098 |
| 3099 | Do | 4.05 | 5.74 | 19.37 | 7.90 | 56.82 | 6.12 | 6.0 | 20.2 | 8.2 | 59.2 | 6.4 | Wis. Ex. Sta. Rep., 1888, p. 141 | 3099 |
| 3100 | Do | 11.31 | 4.92 | 14.75 | 6.09 | 58.13 | 4.80 | 5.5 | 17.7 | 6.9 | 64.5 | 5.4 | Minn. Ex. Sta. Bul. 8, 1889, p. 14 | 3100 |
| 3101 | Do | 12.15 | 4.78 | 16.56 | 6.04 | 54.85 | 5.62 | 5.4 | 18.9 | 6.9 | 62.4 | 6.4 | do | 3101 |
| 3102 | Do | 12.29 | 6.21 | 17.85 | 9.21 | 49.97 | 4.47 | 7.1 | 20.3 | 10.5 | 57.0 | 5.1 | N. H. Ex. Sta. Bul. 8, 1888 | 3102 |
| | All complete analyses, excluding No. 3098. Maximum | 15.52 | 6.21 | 19.37 | 10.47 | 62.32 | 6.12 | 7.1 | 20.3 | 11.9 | 70.1 | 6.4 | | |
| | All complete analyses, excluding No. 3098. Minimum | 4.05 | 1.99 | 11.13 | 6.04 | 49.97 | 2.50 | 2.3 | 12.5 | 6.9 | 57.0 | 2.8 | | |
| | All complete analyses, excluding No. 3098. Average | **11.81** | **4.64** | **14.92** | **7.40** | **56.72** | **4.51** | **5.2** | **16.8** | **8.4** | **64.5** | **5.1** | | |
| | WASTE PRODUCTS SEPARATED FROM WHEAT. | | | | | | | | | | | | | |
| | Wheat screenings: | | | | | | | | | | | | | |
| 3103 | Broken and shrunken wheat, chess, cockle, and seeds of other weeds. *a* | 7.80 | 3.80 | 14.78 | 4.95 | 66.02 | 2.65 | 4.1 | 16.0 | 5.4 | 71.6 | 2.9 | Mich. Ex. Sta. Bul. 49, 1889 | 3103 |
| 3104 | Do. *a* | 8.40 | 3.76 | 15.06 | 6.10 | 63.65 | 3.03 | 4.1 | 16.5 | 6.7 | 69.4 | 3.3 | do | 3104 |
| 3105 | No particulars given | 12.75 | 2.76 | 8.31 | 6.82 | 66.11 | 3.25 | 3.2 | 9.6 | 7.8 | 75.7 | 3.7 | Univ. Minn. Ex. Sta. Bul. 8, 1889, p. 14 | 3105 |
| 3106 | Do | 12.28 | 3.62 | 12.06 | 7.47 | 61.25 | 3.32 | 4.1 | 13.8 | 8.5 | 69.8 | 3.8 | do | 3106 |
| 3107 | Do | 11.79 | 1.89 | 9.06 | 4.22 | 70.38 | 2.66 | 2.1 | 10.2 | 4.8 | 79.9 | 3.0 | do | 3107 |
| 3108 | Do | 13.60 | 2.16 | 12.44 | 1.69 | 67.30 | 2.81 | 2.5 | 14.4 | 2.0 | 77.9 | 3.2 | do | 3108 |
| 3109 | Do | 11.40 | 3.38 | 11.75 | 5.66 | 64.77 | 3.04 | 3.8 | 13.3 | 6.4 | 73.1 | 3.4 | do | 3109 |
| 3110 | Do | 12.61 | 2.35 | 15.19 | 3.36 | 63.45 | 3.04 | 2.7 | 17.3 | 3.8 | 72.7 | 3.5 | do | 3110 |
| 3111 | Do | 13.55 | 2.13 | 16.88 | 3.63 | 61.01 | 2.80 | 2.5 | 19.6 | 4.2 | 70.5 | 3.2 | do | 3111 |
| 3112 | Do | 12.04 | 3.21 | 8.94 | 5.45 | 67.49 | 2.87 | 3.6 | 10.2 | 6.2 | 76.7 | 3.3 | do | 3112 |
| | Maximum | 13.60 | 3.80 | 16.88 | 7.47 | 70.38 | 3.32 | 4.1 | 19.6 | 8.5 | 79.9 | 3.8 | | |
| | Minimum | 7.80 | 1.89 | 8.31 | 1.69 | 61.01 | 2.65 | 2.1 | 9.6 | 2.0 | 69.4 | 2.9 | | |
| | Average | **11.62** | **2.91** | **12.48** | **4.93** | **65.11** | **2.95** | **3.3** | **14.1** | **5.5** | **73.7** | **3.4** | | |
| 3113 | Screenings meal | 12.58 | 3.21 | 6.56 | 5.69 | 68.21 | 3.75 | 3.7 | 7.5 | 6.5 | 78.1 | 4.2 | do | 3113 |
| 3114 | Do | 7.32 | 2.92 | 8.99 | 6.64 | 71.38 | 2.75 | 3.2 | 9.7 | 7.2 | 76.9 | 3.0 | do | 3114 |
| | Average | **9.95** | **3.06** | **7.78** | **6.16** | **69.80** | **3.25** | **3.4** | **8.7** | **6.9** | **77.3** | **3.7** | | |

* Adds 107.80.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **BY-PRODUCTS AND WASTE MATERIALS—Continued.** | | | | | | | | | | | | | |
| | WASTE PRODUCTS SEPARATED FROM WHEAT—continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 3115 | Flour of screenings | 13.32 | 2.92 | 9.38 | 8.99 | 62.27 | 3.12 | 3.4 | 10.8 | 10.3 | 71.9 | 3.6 | Univ. Minn. Ex. Sta. Bul. 8, 1889, p. 14 | 3115 |
| 3116 | Do | 12.14 | 2.92 | 7.25 | 3.83 | 69.89 | 3.97 | 3.3 | 8.3 | 4.4 | 79.5 | 4.5 | do | 3116 |
| 3117 | Do | 13.20 | 3.19 | 10.19 | 3.80 | 65.86 | 3.76 | 3.7 | 11.7 | 4.4 | 75.9 | 4.3 | do | 3117 |
| | Average | **12.88** | **3.01** | **8.94** | **5.54** | **66.01** | **3.62** | **3.4** | **10.2** | **6.3** | **76.0** | **4.1** | | |
| 3118 | Cockle bran | 11.37 | 3.02 | 9.44 | 10.97 | 62.39 | 2.81 | 3.4 | 10.7 | 12.4 | 70.3 | 3.2 | do | 3118 |
| 3119 | Do | 11.84 | 3.09 | 10.50 | 9.08 | 63.37 | 2.12 | 3.5 | 11.9 | 10.2 | 72.0 | 2.4 | do | 3119 |
| 3120 | Do | 10.18 | 3.55 | 11.92 | 7.58 | 64.36 | 2.41 | 3.9 | 12.2 | 8.4 | 71.8 | 2.7 | do | 3120 |
| | Average | **11.13** | **3.22** | **10.62** | **9.21** | **63.37** | **2.45** | **3.6** | **11.9** | **10.3** | **71.4** | **2.8** | | |
| | BY-PRODUCTS FROM RICE. | | | | | | | | | | | | | |
| 3121 | Rice bran | 9.30 | 8.35 | 12.78 | 2.00 | 62.34 | 5.23 | 9.3 | 14.0 | 2.2 | 68.8 | 5.7 | U. S. Dept. Agr. Rep., 1880, p. 169 | 3121 |
| 3122 | Rice bran, "Douse" | 8.78 | 12.40 | 10.93 | 17.76 | 41.93 | 8.20 | 13.6 | 11.9 | 19.4 | 46.1 | 9.0 | N. C. Ex. Sta. Rep., 1882, p. 91 | 3122 |
| 3123 | Rice bran, No. 1 | 9.96 | 9.26 | 13.56 | 7.00 | 49.32 | 10.90 | 10.3 | 15.0 | 7.9 | 54.8 | 12.0 | La. Dept. Agr. Bul. 9, p. 35 | 3123 |
| 3124 | Rice bran, No. 2 | 9.56 | 8.82 | 11.81 | 9.85 | 50.46 | 9.50 | 9.7 | 13.0 | 10.9 | 56.0 | 10.4 | do | 3124 |
| 3125 | Rice bran *a* | 10.67 | 11.00 | 11.29 | 10.95 | 46.02 | 9.97 | 12.4 | 12.6 | 12.3 | 51.6 | 11.1 | La. Ex. Sta. Bul. 24, p. 389 | 3125 |
| | Maximum | 10.67 | 12.40 | 13.56 | 17.76 | 62.34 | 10.90 | 13.6 | 15.0 | 19.4 | 68.8 | 12.0 | | |
| | Minimum | 8.78 | 8.35 | 10.93 | 2.00 | 41.93 | 5.23 | 9.3 | 11.9 | 2.2 | 46.1 | 5.7 | | |
| | Average | **9.65** | **9.97** | **12.07** | **9.51** | **50.04** | **8.76** | **11.0** | **13.4** | **10.4** | **55.5** | **9.7** | | |
| 3126 | Rice hulls, lowland | 7.70 | 15.10 | 4.68 | 30.27 | 41.60 | 0.65 | 16.3 | 5.1 | 32.8 | 45.1 | 0.7 | N. C. Ex. Sta. Rep., 1882, p. 91 | 3126 |
| 3127 | Rice hulls, upland | 8.50 | 10.52 | 3.12 | 38.57 | 38.74 | 0.55 | 11.4 | 3.5 | 42.1 | 42.4 | 0.6 | do | 3127 |
| 3128 | Rice hulls *a* | 8.27 | 13.85 | 2.89 | 38.15 | 35.99 | 0.85 | 15.1 | 3.2 | 41.6 | 39.2 | 0.9 | La. Ex. Sta. Bul. 24, p. 389 | 3128 |
| | Average | **8.16** | **13.16** | **3.56** | **35.67** | **38.77** | **0.68** | **14.4** | **3.9** | **38.8** | **42.2** | **0.7** | | |
| 3129 | Rice polish | 11.21 | 2.80 | 12.93 | 2.41 | 62.96 | 7.69 | 3.2 | 14.4 | 2.7 | 71.1 | 8.6 | N. C. Ex. Sta. Rep., 1882, p. 91 | 3129 |
| 3130 | Rice polish, No. 1 | 9.00 | 7.37 | 11.37 | 5.86 | 59.90 | 6.50 | 8.1 | 12.5 | 6.4 | 65.9 | 7.1 | La. Dept. Agr. Bul. 9, p. 35 | 3130 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3131 | Rice polish, No. 2 | 9.23 | 11.30 | 11.38 | 14.45 | 45.54 | 8.00 | 12.1 | 12.5 | 15.9 | 50.7 | 8.8 | do | 3131 |
| 3132 | Rice polish *a* | 10.63 | 5.45 | 10.94 | 2.62 | 63.34 | 7.02 | 6.1 | 12.2 | 2.9 | 70.9 | 7.9 | La. Ex. Sta. Bul. 24, p. 389 | 3132 |
| | Average | **10.04** | **6.73** | **11.65** | **6.33** | **57.95** | **7.30** | **7.4** | **12.9** | **7.0** | **64.6** | **8.1** | | |
| | BY-PRODUCTS FROM BUCKWHEAT. | | | | | | | | | | | | | |
| 3133 | Buckwheat bran *b* | 13.22 | 4.48 | 20.06 | 56.71 | | 5.53 | 5.2 | 23.1 | 65.4 | | 6.3 | N. J. Ex. Sta. Rep., 1885, p. 168 | 3133 |
| 3134 | Do. *b* | 13.04 | 3.75 | 23.53 | 53.27 | | 6.08 | 4.4 | 26.9 | 61.7 | | 7.0 | do | 3134 |
| 3135 | Buckwheat bran and middlings *b* | 13.06 | 3.59 | 18.87 | 59.58 | | 4.90 | 4.1 | 21.6 | 68.7 | | 5.6 | do | 3135 |
| 3136 | Do. *b* | 14.55 | 3.50 | 17.38 | 59.99 | | 4.58 | 4.1 | 20.3 | 70.2 | | 5.4 | do | 3136 |
| 3137 | Buckwheat bran, old process *b* | 16.04 | 2.42 | 10.00 | 69.35 | | 2.19 | 2.9 | 11.9 | 82.6 | | 2.6 | do | 3137 |
| 3138 | Buckwheat bran | 14.00 | 3.40 | 17.10 | 14.70 | 46.40 | 4.40 | 4.0 | 19.9 | 17.0 | 54.0 | 5.1 | Ontario Agr. Col. Bul. 14, 1887, p. 6 | 3138 |
| 3139 | Do | 9.03 | 3.42 | 6.44 | 31.36 | 47.68 | 2.07 | 3.8 | 7.1 | 34.5 | 52.3 | 2.3 | Vt. Ex. Sta. Rep., 1887, p. 134 | 3139 |
| 3140 | Buckwheat hulls | 14.07 | 2.27 | 4.87 | 38.49 | 39.20 | 1.10 | 2.7 | 5.7 | 44.7 | 45.7 | 1.2 | Conn. State Ex. Sta. Rep., 1886, p. 111. | 3140 |
| 3141 | Buckwheat middlings | 16.33 | 5.50 | 30.31 | 4.02 | 36.29 | 7.55 | 6.6 | 36.1 | 4.8 | 43.5 | 9.0 | do | 3141 |
| 3142 | Do | 9.52 | 4.54 | 25.13 | 2.43 | 52.71 | 5.67 | 5.0 | 27.8 | 2.7 | 58.2 | 6.3 | Vt. Ex. Sta. Rep., 1887, p. 133 | 3142 |
| 3143 | Do | 13.71 | 4.35 | 31.25 | 5.70 | 36.93 | 8.06 | 5.1 | 36.2 | 6.6 | 42.9 | 9.2 | Conn. State Ex. Sta. Rep., 1888, p. 152. | 3143 |
| | Average | **13.18** | **4.79** | **28.89** | **4.05** | **41.99** | **7.10** | **5.5** | **33.3** | **4.6** | **48.5** | **8.1** | | |
| | BY-PRODUCTS FROM COTTON SEED. | | | | | | | | | | | | | |
| 3144 | Cotton seed cake | 6.82 | 7.80 | 44.41 | 11.76 | 12.74 | 16.47 | 8.4 | 47.6 | 12.6 | 13.7 | 17.7 | Trans. Conn. Agr. Soc., 1857, p. 84 | 3144 |
| 3145 | Cotton-seed meal | 7.24 | 5.83 | 41.45 | 3.08 | 24.39 | 18.01 | 6.3 | 44.7 | 3.3 | 26.3 | 19.4 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 38. | 3145 |
| 3146 | Do | 8.10 | 7.95 | 43.40 | 6.48 | 20.12 | 13.95 | 8.8 | 47.2 | 7.1 | 21.7 | 15.2 | U. S. Dept. Agr. Rep., 1880, p. 169 | 3146 |
| 3147 | Do | 8.69 | 7.34 | 44.56 | 3.88 | 23.56 | 11.97 | 8.1 | 48.8 | 4.3 | 25.6 | 13.2 | N. J. Ex. Sta. Rep., 1880, p. 46 | 3147 |
| 3148 | Do | 8.87 | 6.99 | 45.00 | 4.65 | 22.89 | 11.60 | 7.7 | 49.4 | 5.1 | 25.1 | 12.7 | Conn. State Ex. Sta. Rep., 1880, p. 84. | 3148 |
| 3149 | Do | 8.87 | 7.34 | 43.06 | 4.83 | 23.73 | 12.17 | 8.1 | 47.2 | 5.3 | 26.0 | 13.4 | do | 3149 |
| 3150 | Do | 9.06 | 7.50 | 42.50 | 4.24 | 22.12 | 14.58 | 8.2 | 46.7 | 4.7 | 24.3 | 16.1 | Conn. State Ex. Sta. Rep., 1881, p. 84. | 3150 |
| 3151 | Do | 8.90 | 8.30 | 43.75 | 4.09 | 19.07 | 15.89 | 9.1 | 48.0 | 4.5 | 20.9 | 17.5 | U. S. Dept. Agr. Rep., 1881–'82, p. 553. | 3151 |
| 3152 | Do | 7.62 | 6.38 | 47.60 | 8.18 | 15.68 | 14.54 | 6.9 | 51.5 | 8.9 | 16.9 | 15.8 | do | 3152 |
| 3153 | Do | 5.78 | 5.73 | 50.81 | 4.59 | 21.82 | 11.29 | 6.1 | 53.9 | 4.9 | 23.1 | 12.0 | N. J. Ex. Sta. Rep., 1882, p. 70 | 3153 |
| 3154 | Do | 7.57 | 6.58 | 46.69 | 3.70 | 21.32 | 14.14 | 7.1 | 50.5 | 4.0 | 23.0 | 15.4 | do | 3154 |
| 3155 | Do | 9.00 | 8.80 | 40.20 | 5.20 | 24.30 | 12.50 | 9.6 | 44.1 | 5.7 | 26.9 | 13.7 | Agr. of Me., 1882, p. 302 | 3155 |
| 3156 | Do | 8.82 | 6.71 | 40.90 | 4.83 | 25.19 | 13.55 | 7.3 | 44.8 | 5.3 | 27.8 | 14.8 | N. Y. Cornell Ex. Sta. Rep., 1883, p. 41. | 3156 |
| 3157 | Do | 7.61 | 6.53 | 46.12 | 4.90 | 21.67 | 13.17 | 7.1 | 49.9 | 5.3 | 23.5 | 14.2 | Conn. State Ex. Sta. Rep., 1883, p. 89. | 3157 |
| 3158 | Do | 7.29 | 6.85 | 45.31 | 5.32 | 21.93 | 13.30 | 7.4 | 48.9 | 5.7 | 23.7 | 14.3 | do | 3158 |
| 3159 | Do. *b* | 6.65 | 7.71 | 43.69 | 4.30 | 27.41 | 10.24 | 8.3 | 46.7 | 4.7 | 29.3 | 11.0 | N. J. Ex. Sta. Rep., 1883, p. 74 | 3159 |
| 3160 | Do. *b* | 6.89 | 7.80 | 42.56 | 8.05 | 21.58 | 13.12 | 8.3 | 45.7 | 8.6 | 23.3 | 14.1 | do | 3160 |
| 3161 | Do | 9.13 | 6.91 | 42.75 | 5.71 | 23.84 | 11.66 | 7.6 | 47.0 | 6.3 | 26.3 | 12.8 | Mass. State Ex. Sta. Rep., 1883, p. 84. | 3161 |
| 3162 | Do | 8.38 | 7.79 | 38.91 | 6.17 | 26.89 | 11.86 | 8.5 | 42.5 | 6.7 | 29.4 | 12.9 | Mass. State Ex. Sta. Rep., 1883, p. 85. | 3162 |
| 3163 | Cotton-seed meal, new (roller) process | 7.10 | 8.68 | 39.56 | 7.00 | 24.89 | 12.77 | 9.3 | 42.6 | 7.5 | 26.9 | 13.7 | do | 3163 |
| 3164 | Cotton-seed meal, old (press) process | 8.15 | 6.84 | 33.54 | 6.80 | 31.08 | 13.59 | 7.5 | 36.5 | 7.4 | 33.9 | 14.7 | Mass. State Ex. Sta. Rep., 1883, p. 86. | 3164 |
| 3165 | Cotton-seed meal | 7.09 | 8.50 | 23.27 | 9.78 | 38.68 | 12.68 | 9.2 | 25.0 | 10.5 | 41.7 | 13.6 | Mass. State Ex. Sta. Rep., 1883, p. 87. | 3165 |
| 3166 | Do | 7.59 | 6.48 | 44.00 | 2.77 | 25.72 | 13.44 | 7.0 | 47.6 | 3.0 | 27.9 | 14.5 | Univ. Wis. Ex. Sta. Bul. 3, p. 6 | 3166 |
| 3167 | Do | 18.52 | 6.55 | 35.21 | 5.96 | 21.44 | 12.52 | 8.0 | 43.2 | 7.3 | 26.4 | 15.1 | N. Y. Ex. Sta. Rep., 1884, p. 333 | 3167 |
| 3168 | Do. *b* | 10.67 | 6.63 | 43.25 | 29.06 | | 10.39 | 7.4 | 48.4 | 32.6 | | 11.6 | N. J. Ex. Sta. Rep., 1885, p. 172 | 3168 |
| 3169 | Do. *b* | 7.99 | 6.43 | 44.31 | 28.39 | | 12.88 | 7.0 | 48.1 | 30.9 | | 14.0 | do | 31C9 |

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | **BY-PRODUCTS AND WASTE MATERIALS—Continued.** | | | | | | | | | | | | | |
| | BY-PRODUCTS FROM COTTON SEED—continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 3170 | Cotton-seed meal | 8.50 | 7.00 | 43.75 | 4.75 | 21.40 | 14.60 | 7.7 | 47.8 | 5.2 | 23.4 | 15.9 | Me. Ex. Sta. Rep., 1885–'86, p. 51 | 3170 |
| 3171 | Do | 8.45 | 8.41 | 41.88 | 3.45 | 20.94 | 16.87 | 9.2 | 45.7 | 3.8 | 22.9 | 18.4 | N. Y. State Ex. Sta. Rep., 1886, p. 366 | 3171 |
| 3172 | Do | 7.95 | 6.96 | 44.00 | 4.10 | 21.93 | 15.06 | 7.6 | 47.8 | 4.5 | 23.7 | 16.4 | Conn. State Ex. Sta. Rep., 1886, p. 113 | 3172 |
| 3173 | Do | 8.90 | 7.27 | 43.94 | 9.61 | 19.40 | 10.88 | 8.0 | 48.2 | 10.5 | 21.4 | 11.9 | Me. Ex. Sta. Rep., 1886–'87, p. 68 | 3173 |
| 3174 | Do | 7.87 | 6.94 | 46.12 | 6.79 | 21.00 | 11.28 | 7.5 | 50.1 | 7.4 | 22.8 | 12.2 | do | 3174 |
| 3175 | Do | 6.64 | 7.90 | 40.42 | 5.85 | 24.22 | 14.97 | 8.5 | 43.3 | 6.3 | 25.9 | 16.0 | Vt. Ex. Sta. Rep., 1887, p. 137 | 3175 |
| 3176 | Do | 6.46 | 6.88 | 39.37 | 5.38 | 28.68 | 13.23 | 7.4 | 42.1 | 5.8 | 30.6 | 14.1 | Vt. Ex. Sta. Rep., 1887, p. 136 | 3176 |
| 3177 | Do | 9.55 | 7.20 | 44.22 | 6.50 | 23.77 | 8.76 | 8.0 | 48.9 | 7.2 | 26.2 | 9.7 | Ark. Ex. Sta. Rep., 1888, p. 133 | 3177 |
| 3178 | Do | 6.84 | 6.58 | 37.39 | 10.09 | 26.99 | 12.23 | 7.1 | 40.1 | 10.8 | 29.0 | 13.0 | Mass. State Ex. Sta. Rep., 1888, p. 93 | 3178 |
| 3179 | Do | 6.68 | 6.65 | 43.56 | 8.14 | 17.17 | 17.20 | 7.1 | 46.7 | 8.7 | 19.1 | 18.4 | Vt. Ex. Sta. Rep., 1888, p. 76 | 3179 |
| 3180 | Do. *a* | 6.43 | 7.23 | 44.61 | 1.28 | 28.93 | 11.52 | 7.7 | 47.7 | 1.4 | 30.9 | 12.3 | N. Y. State Ex. Sta. Rep., 1888, p. 238 | 3180 |
| 3181 | Do | 8.86 | 5.81 | 46.32 | 6.38 | 23.68 | 8.95 | 6.4 | 50.8 | 7.0 | 26.0 | 9.8 | N. H. Ex. Sta. Bul. 8, 1888 | 3181 |
| | All analyses: Maximum | 18.52 | 8.80 | 50.81 | 10.09 | 38.68 | 18.01 | 9.6 | 53.9 | 12.6 | 41.7 | 19.4 | | |
| | All analyses: Minimum | 5.78 | 5.73 | 23.27 | 1.28 | 15.68 | 8.76 | 6.1 | 25.0 | 1.4 | 13.7 | 9.7 | | |
| | All analyses: Average | **8.17** | **7.17** | **42.31** | **5.62** | **23.65** | **13.08** | **7.8** | **46.1** | **6.1** | **25.8** | **14.2** | | |
| 3182 | Cotton-seed bran | 11.99 | 2.18 | 6.37 | 30.83 | 47.33 | 1.33 | 2.5 | 7.3 | 35.0 | 53.7 | 1.5 | Conn. Ex. Sta Rep., 1888, p. 145 | 3182 |
| 3183 | Cotton-seed hulls *c* | 10.17 | 2.47 | 4.40 | 45.17 | 34.67 | 2.12 | 2.7 | 4.9 | 51.4 | 38.6 | 2.4 | Mass. Ex. Sta. Rep., 1888, p. 92 | 3183 |
| 3184 | Do. *c* | 11.45 | 3.00 | 4.76 | 35.75 | 41.24 | 3.80 | 3.4 | 5.4 | 40.2 | 46.7 | 4.3 | do | 3184 |
| 3185 | Do | 10.05 | 2.58 | 3.46 | 44.35 | 38.12 | 1.44 | 2.9 | 3.9 | 49.3 | 42.3 | 1.6 | Ark. Ex. Sta. Bul. 9, 1889 | 3185 |
| 3186 | Do | 9.96 | 2.30 | 3.56 | 51.40 | 32.03 | 0.75 | 2.6 | 4.0 | 57.1 | 35.4 | 0.9 | Ga. Ex. Sta. Bul. 7, 1890 | 3186 |
| | Average, excluding 3182 | **10.41** | **2.59** | **4.04** | **44.42** | **36.52** | **2.02** | **2.9** | **4.5** | **49.5** | **40.9** | **2.2** | | |
| | BY-PRODUCTS FROM LINSEED. | | | | | | | | | | | | | |
| 3187 | Linseed cake, old process | 10.04 | 5.10 | 28.73 | 12.41 | 33.47 | 10.25 | 5.7 | 31.9 | 13.8 | 37.2 | 11.4 | N. Y. State Ex. Sta. Rep., 1885, p. 306 | 3187 |
| 3188 | Linseed cake, old process, made in Canada | 8.61 | 6.47 | 30.00 | 7.01 | 36.77 | 11.14 | 7.1 | 32.8 | 7.7 | 40.4 | 12.0 | Ontario Agr. Col. Bul. 34, 1888 | 3188 |
| 3189 | Linseed cake, unclassified, ground *c* | 8.35 | 6.89 | 34.14 | 7.97 | 37.43 | 5.22 | 7.5 | 37.3 | 8.7 | 40.8 | 5.7 | Mass. State Ex. Sta. Rep., 1883, p. 83 | 3189 |
| 3190 | Do. *b* | 10.34 | 5.87 | 34.93 | 9.36 | 33.44 | 6.06 | 6.8 | 39.0 | 10.5 | 37.0 | 6.7 | N. J. Ex. Sta. Rep., 1883, p. 74 | 3190 |
| 3191 | Do | 10.59 | 6.15 | 34.19 | 8.33 | 36.74 | 5.00 | 6.9 | 38.2 | 9.3 | 41.1 | 4.5 | N. J. Ex. Sta. Rep., 1884, p. 106 | 3191 |
| 3192 | Do | 10.80 | 4.95 | 31.81 | 8.43 | 39.11 | 4.90 | 5.6 | 35.6 | 9.4 | 43.9 | 5.5 | do | 3192 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3193 | Linseed meal, old process | 9.13 | 8.16 | 32.43 | 7.26 | 31.45 | 11.57 | 4.0 | 35.7 | 8.0 | 34.6 | 12.7 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 38. | 3193 |
| 3194 | Do | 6.17 | 5.36 | 27.68 | 7.57 | 41.89 | 11.33 | 5.6 | 29.5 | 8.0 | 44.8 | 12.1 | N. J. Ex. Sta. Rep., 1880, p. 47 | 3194 |
| 3195 | Do | 12.43 | 5.90 | 30.88 | 7.42 | 36.54 | 6.83 | 6.7 | 35.3 | 8.4 | 41.9 | 7.7 | N. J. Ex. Sta. Rep., 1882, p. 70 | 3195 |
| 3196 | Do | 7.13 | 5.53 | 33.95 | 7.12 | 41.11 | 5.16 | 5.9 | 36.6 | 7.7 | 44.2 | 5.6 | N. Y. Cornell Ex. Sta. Rep., 1883, p. 41. | 3196 |
| 3197 | Do | 8.07 | 5.33 | 31.71 | 12.31 | 34.38 | 8.20 | 5.8 | 34.5 | 13.4 | 37.4 | 8.9 | N. Y. State Ex. Sta. Rep., 1884, p. 332. | 3197 |
| 3198 | Do | 10.00 | 5.08 | 31.38 | 12.90 | 31.29 | 9.35 | 5.6 | 34.9 | 14.3 | 34.8 | 10.4 | ....do | 3198 |
| 3199 | Do | 12.39 | 6.29 | 31.50 | 8.03 | 36.73 | 5.06 | 7.2 | 35.9 | 9.1 | 42.0 | 5.8 | N. J. Ex. Sta. Rep., 1884, p. 106 | 3199 |
| 3200 | Do | 9.43 | 5.24 | 32.03 | 11.06 | 35.71 | 6.53 | 5.8 | 35.4 | 12.2 | 39.4 | 7.2 | N. Y. State Ex. Sta. Rep., 1885, p. 306. | 3200 |
| 3201 | Do.* | 8.07 | 6.00 | 32.20 | 9.73 | 39.97 | 6.03 | 6.5 | 34.8 | 10.7 | 41.5 | 6.5 | Ohio Ex. Sta. Rep., 1885, p. 235 | 3201 |
| 3202 | Do. *b* | 9.75 | 6.61 | 32.00 | 44.95 | | 6.69 | 7.3 | 35.5 | 49.8 | | 7.4 | N. J. Ex. Sta. Rep., 1885, p. 172 | 3202 |
| 3203 | Do. *b* | 9.32 | 5.70 | 34.25 | 43.60 | | 7.13 | 6.3 | 37.7 | 48.1 | | 7.9 | ....do | 3203 |
| 3204 | Do. *b* | 10.30 | 5.36 | 32.19 | 44.35 | | 7.80 | 6.0 | 35.9 | 49.4 | | 8.7 | ....do | 3204 |
| 3205 | Do. *b* | 10.19 | 5.54 | 33.63 | 42.91 | | 7.73 | 6.1 | 37.3 | 47.9 | | 8.7 | ....do | 3205 |
| 3206 | Do. *b* | 10.52 | 5.50 | 32.94 | 43.82 | | 7.22 | 6.1 | 56.9 | 48.9 | | 8.1 | ....do | 3206 |
| 3207 | Do. *b* | 6.69 | 6.31 | 31.81 | 47.61 | | 7.58 | 6.7 | 34.1 | 51.1 | | 8.1 | ....do | 3207 |
| 3208 | Do. *b* | 7.63 | 5.18 | 38.19 | 7.21 | 32.39 | 9.40 | 5.6 | 41.3 | 7.8 | 35.2 | 10.1 | N. J. Ex. Sta. Rep., 1886, p. 161 | 3208 |
| 3209 | Do | 10.15 | 5.17 | 32.57 | 4.68 | 39.26 | 8.17 | 5.7 | 36.3 | 5.2 | 43.7 | 9.1 | N. Y. State Ex. Sta. Rep., 1886, p. 366 | 3209 |
| 3210 | Do | 10.53 | 5.42 | 31.02 | 11.46 | 31.85 | 9.72 | 6.0 | 34.7 | 12.8 | 35.6 | 10.9 | ....do | 3210 |
| 3211 | Do | 8.02 | 7.26 | 30.75 | 13.25 | 30.82 | 9.89 | 7.9 | 32.8 | 14.3 | 33.5 | 10.3 | Maine Ex. Sta. Rep., 1886–'87, p. 68 | 3211 |
| 3212 | Do | 9.85 | 5.14 | 35.31 | 7.89 | 32.01 | 9.80 | 5.7 | 39.2 | 8.8 | 35.5 | 10.8 | ....do | 3212 |
| 3213 | Do | 10.27 | 5.12 | 36.06 | 7.36 | 34.53 | 6.66 | 5.7 | 40.2 | 8.2 | 38.5 | 7.4 | Conn. State Ex. Sta. Rep., 1888, p. 152. | 3213 |
| 3214 | Do | 5.60 | 5.02 | 36.00 | 8.19 | 38.71 | 6.48 | 5.3 | 38.1 | 8.7 | 41.0 | 6.9 | Vt. Ex. Sta. Rep., 1888, p. 76 | 3214 |
| 3215 | Do | 8.45 | 5.30 | 35.12 | 7.57 | 35.79 | 7.77 | 5.8 | 38.4 | 8.3 | 39.0 | 8.5 | ....do | 3215 |
| 3216 | Do. *a* | 10.56 | 4.59 | 35.94 | 11.89 | 28.58 | 8.64 | 5.1 | 40.2 | 13.3 | 31.7 | 9.7 | N. Y. State Ex. Sta. Rep., 1888, p. 238. | 3216 |
| 3217 | Do. *c* | 10.46 | 6.35 | 34.56 | 7.61 | 33.86 | 7.16 | 7.1 | 38.6 | 8.5 | 37.8 | 8.0 | Mass. Ex. Sta. Rep., 1889, p. 136 | 3217 |
| 3218 | Do | 7.48 | 5.27 | 34.42 | 7.40 | 38.59 | 6.85 | 5.7 | 37.2 | 8.0 | 41.7 | 7.4 | ....do | 3218 |
| 3219 | Do | 10.43 | 7.52 | 27.77 | 8.69 | 40.04 | 5.55 | 8.4 | 31.0 | 9.7 | 44.7 | 6.2 | Mass. Ex. Sta. Rep., 1889, p. 138 | 3219 |
| | All complete analyses: Maximum | 12.43 | 8.16 | 38.19 | 13.25 | 41.89 | 11.57 | 8.4 | 41.3 | 14.3 | 44.8 | 12.7 | | |
| | All complete analyses: Minimum | 5.60 | 4.59 | 27.68 | 4.68 | 28.38 | 5.06 | 4.0 | 29.5 | 5.2 | 33.5 | 5.6 | | |
| | All complete analyses: Average | **9.16** | **5.72** | **32.93** | **8.88** | **35.40** | **7.91** | **6.3** | **36.2** | **9.7** | **39.2** | **8.6** | | |
| 3220 | Linseed meal, new process | 10.76 | 6.71 | 35.64 | 8.86 | 35.22 | 2.81 | 7.5 | 39.9 | 9.9 | 39.5 | 3.2 | Conn. Ex. Sta. Rep., 1879, p. 93 | 3220 |
| 3221 | Do. *a* | 9.35 | 5.90 | 37.10 | 7.58 | 37.42 | 2.65 | 6.5 | 40.9 | 8.3 | 41.3 | 3.0 | U. S. Dept. Agr. Rep., 1880, p. 169 | 3221 |
| 3222 | Do | 6.79 | 6.05 | 27.12 | 8.00 | 48.03 | 4.01 | 6.5 | 29.0 | 8.6 | 51.7 | 4.2 | N. J. Ex. Sta. Rep., 1880, p. 47 | 3222 |
| 3223 | Do | 12.91 | 6.08 | 32.01 | 8.77 | 37.56 | 2.67 | 7.0 | 36.7 | 10.1 | 43.1 | 3.1 | Conn. Ex. Sta. Rep., 1881, p. 84 | 3223 |
| 3224 | Do | 13.35 | 6.08 | 34.25 | 8.00 | 37.02 | 1.30 | 7.0 | 39.5 | 9.2 | 42.8 | 1.5 | Conn. Ex. Sta. Rep., 1883, p. 89 | 3224 |
| 3225 | Do. *b* | 9.90 | 5.56 | 34.56 | 9.00 | 37.43 | 3.56 | 6.2 | 38.3 | 10.0 | 41.5 | 4.0 | N. J. Ex. Sta. Rep., 1883, p. 74 | 3225 |
| 3226 | Do | 9.90 | 6.74 | 35.81 | 8.63 | 36.65 | 2.27 | 7.5 | 39.7 | 9.6 | 40.7 | 2.5 | Conn. State Ex. Sta. Rep., 1884, p. 108. | 3226 |
| 3227 | Do | 7.88 | 5.38 | 30.11 | 13.99 | 38.28 | 4.36 | 5.8 | 32.7 | 15.2 | 41.6 | 4.7 | N. Y. State Ex. Sta. Rep., 1884, p. 332. | 3227 |
| 3228 | Do | 8.55 | 5.07 | 32.35 | 15.77 | 38.13 | 2.13 | 5.5 | 35.4 | 15.1 | 41.7 | 2.3 | ....do | 3228 |
| 3229 | Do | 12.04 | 4.96 | 29.91 | 10.99 | 39.87 | 3.23 | 5.6 | 34.0 | 12.5 | 44.2 | 3.7 | N. Y. State Ex. Sta. Rep., 1885, p. 306. | 3229 |
| 3230 | Do | 12.70 | 5.14 | 33.25 | 8.08 | 37.19 | 3.64 | 5.9 | 38.1 | 9.4 | 42.4 | 4.2 | Conn. State Ex. Sta. Rep., 1885, p. 42. | 3230 |
| 3231 | Do | 12.25 | 5.30 | 34.19 | 9.28 | 35.48 | 3.50 | 6.0 | 39.0 | 10.5 | 40.5 | 4.0 | Ohio Ex. Sta. Rep., 1885, p. 235 | 3231 |
| 3232 | Do. *b* | 8.61 | 6.04 | 35.69 | 47.31 | | 2.35 | 6.6 | 39.0 | 51.8 | | 2.6 | N. J. Ex. Sta. Rep., 1885, p. 172 | 3232 |

* Adds 102.

| | | In fresh or air-dry material. | | | | | | Calculated to water-free substance. | | | | | References to publications. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Water. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | Ash. | Protein. | Fiber. | Nitrogen-free extract. | Fat. | | |
| | BY-PRODUCTS AND WASTE MATERIALS—Continued. | | | | | | | | | | | | | |
| | BY-PRODUCTS FROM LINSEED—continued. | % | % | % | % | % | % | % | % | % | % | % | | |
| 3233 | Linseed meal, new process *c* | 6.01 | 5.64 | 38.35 | 8.64 | 38.45 | 2.91 | 6.0 | 40.8 | 9.2 | 40.9 | 3.1 | Mass. State Ex. Sta. Rep., 1889, p. 137 | 3233 |
| 3234 | Do | 8.58 | 6.85 | 29.72 | 9.41 | 42.52 | 2.92 | 7.5 | 32.5 | 10.3 | 46.5 | 3.2 | Mass. State Ex. Sta. Rep., 1889, p. 138 | 3234 |
| | All complete analyses—Maximum | 13.35 | 6.85 | 38.35 | 13.99 | 48.03 | 4.36 | 7.5 | 40.9 | 15.2 | 51.7 | 4.7 | | |
| | All complete analyses—Minimum | 6.01 | 4.96 | 27.12 | 7.58 | 35.22 | 1.30 | 5.5 | 29.0 | 8.3 | 39.5 | 1.5 | | |
| | All complete analyses—Average | **10.07** | **5.82** | **33.17** | **9.49** | **38.46** | **2.99** | **6.5** | **36.9** | **10.5** | **42.8** | **3.3** | | |
| | BY-PRODUCTS FROM MISCELLANEOUS SEEDS. | | | | | | | | | | | | | |
| 3235 | Palm-nut meal | 7.90 | 3.99 | 13.53 | 18.75 | 41.05 | 14.78 | 4.3 | 14.7 | 20.4 | 44.6 | 16.0 | Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 38. | 3235 |
| 3236 | Do | 6.14 | 3.72 | 13.63 | 23.98 | 33.80 | 18.73 | 4.0 | 14.5 | 25.6 | 36.0 | 19.9 | N. J. Ex. Sta. Rep., 1882, p. 71 | 3236 |
| 3237 | Palm-nut meal, imported | 10.84 | 3.51 | 16.01 | 21.57 | 41.66 | 6.41 | 3.9 | 17.9 | 24.1 | 46.9 | 7.2 | ....do | 3237 |
| | Average | **8.29** | **3.74** | **14.39** | **21.43** | **38.87** | **13.31** | **4.0** | **15.7** | **23.3** | **42.5** | **14.5** | | |
| 3238 | Vegetable ivory, sawdust from button factory | 18.78 | 1.08 | 3.37 | 7.50 | 68.57 | 0.70 | 1.3 | 4.1 | 9.2 | 84.5 | 0.9 | Conn. State Ex. Sta. Rep., 1880, p. 86. | 3238 |
| 3239 | Pea feed | 10.09 | 3.02 | 14.94 | 70.78 | | 1.17 | 3.3 | 16.5 | 78.9 | | 1.3 | N. J. Ex. Sta. Rep., 1885, p. 166 | 3239 |
| 3240 | Bean hulls * | 5.07 | 5.70 | 7.83 | 33.99 | 45.39 | 1.02 | | | | | | Wis. Ex. Sta. Rep., 1888, p. 141 | 3240 |
| 3241 | Cocoa dust from cocoa manufacture, inside and outside parts of cocoa bean, with some foreign matter *c* | 7.10 | 6.32 | 14.39 | 5.38 | 42.84 | 23.97 | 6.8 | 15.5 | 5.8 | 46.1 | 25.8 | Mass. State Ex. Sta. Rep., 1883, p. 88. | 3241 |
| 3242 | Date stones, from light-colored dates, sugar-cured. | 7.71 | 1.05 | 5.16 | 24.07 | 53.06 | 8.95 | 1.2 | 5.6 | 26.1 | 57.4 | 9.7 | Bussey Inst. Bul. vol. I, 1874–'76 p. 375. | 3242 |
| 3243 | Date stones, from dark-colored dates, molasses-cured. | 10.83 | 1.02 | 5.75 | 22.06 | 52.29 | 8.05 | 1.2 | 6.5 | 24.8 | 58.6 | 8.9 | ....do | 3243 |
| 3244 | Peach stones, kernels removed | 5.53 | 0.36 | 0.58 | 70.63 | 22.81 | 0.09 | 0.4 | 0.6 | 74.9 | 24.0 | 0.1 | ....do | 3244 |
| 3245 | Prune stones, kernels removed | 10.96 | 0.40 | 0.31 | 48.74 | 38.87 | 0.72 | 0.5 | 0.4 | 54.7 | 43.6 | 0.8 | ....do | 3245 |
| | POMACE AND BAGASSE. | | | | | | | | | | | | | |
| | Apple pomace: | | | | | | | | | | | | | |
| 3246 | From Baldwin apples chiefly | 77.21 | 0.50 | 0.98 | 3.90 | 15.71 | 1.70 | 2.2 | 4.3 | 17.1 | 68.9 | 7.5 | Bussey Inst. Bul., 1875, p. 365 | 3246 |
| 3247 | Frozen | 72.62 | 0.81 | 1.65 | 5.92 | 17.03 | 1.97 | 3.0 | 6.0 | 21.6 | 62.2 | 7.2 | Conn. State Ex. Sta. Rep., 1881, p. 86. | 3247 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3248 | From Rhode Island Greening apples. (See No. 1604 for analyses of apples.) | 82.50 | 0.19 | 1.22 | 2.90 | 22.64 | 0.55 | 1.1 | 6.9 | 16.6 | 70.2 | 3.2 | Mass. State Ex. Sta. Rep., 1885, p. 90. | 3248 |
| 3249 | From Baldwin apples | 82.50 | 0.32 | 1.35 | 2.30 | 12.77 | 0.76 | 1.8 | 7.7 | 13.1 | 73.0 | 4.4 | do | 3249 |
| 3250 | From sweet apples | 77.87 | 0.44 | 1.48 | 1.95 | 17.56 | 0.70 | 2.0 | 6.7 | 8.8 | 79.3 | 3.2 | Mass. State Ex. Sta. Rep., 1886, p. 42. | 3250 |
| 3251 | No particulars | 74.10 | 0.70 | 1.40 | 5.20 | 16.70 | 1.90 | 2.7 | 5.4 | 20.1 | 64.5 | 7.3 | Pa. State Col. Bul. 15, 1886 | 3251* |
| 3252 | Do | 69.90 | 0.71 | 1.58 | 4.86 | 21.24 | 1.71 | 2.4 | 5.2 | 16.1 | 70.6 | 5.7 | Conn. State Ex. Sta. Rep., 1888, p. 152. | 3252 |
| | Maximum | 82.50 | 0.81 | 1.65 | 5.92 | 21.24 | 1.97 | 3.0 | 7.7 | 21.6 | 79.3 | 7.5 | | |
| | Minimum | 69.90 | 0.19 | 0.98 | 1.95 | 12.64 | 0.55 | 1.1 | 4.3 | 8.8 | 62.2 | 3.2 | | |
| | Average | **76.67** | **0.52** | **1.38** | **3.86** | **16.24** | **1.33** | **2.2** | **5.9** | **16.6** | **69.6** | **5.7** | | |
| 3253 | Bagasse from sorghum, Early Amber sorghum | 83.70 | 0.62 | 0.65 | 3.11 | 11.92 | | 3.8 | 4.0 | 19.1 | 73.1 | | U. S. Dept. Agr. Rep., 1879, p. 57 | 3253 |
| 3254 | Bagasse from sorghum, Honduras sorghum | 84.00 | 0.60 | 0.62 | 3.31 | 11.47 | | 3.7 | 3.9 | 20.7 | 71.7 | | do | 3254 |
| 3255 | Bagasse from maize, Egyptian sugar corn | 88.70 | 0.55 | 0.68 | 2.83 | 7.24 | | 4.9 | 6.0 | 25.0 | 64.1 | | do | 3255 |
| 3256 | Bagasse from sugar beets | 91.31 | 0.47 | 0.94 | 2.13 | 5.11 | 0.04 | 5.4 | 10.8 | 24.5 | 58.9 | 0.4 | Conn. State Ex. Sta. Rep., 1881, p. 86. | 3256 |
| 3257 | Bagasse from sugar beet pulp, diffusion mode | 89.68 | 0.10 | 1.28 | 2.45 | 6.39 | 0.10 | 1.0 | 12.4 | 23.7 | 61.9 | 1.0 | Mass. State Ex, Sta. Rep., 1884, p. 112. | 3257 |
| | MISCELLANEOUS BY-PRODUCTS. | | | | | | | | | | | | | |
| | Distillery waste: | | | | | | | | | | | | | |
| 3258 | Dried sediment deposited from distillery slops. | 5.00 | 11.25 | 27.35 | 8.00 | 36.08 | 12.32 | 11.8 | 28.8 | 8.4 | 38.0 | 13.0 | U. S. Dept. Agr. Rep., 1880, p. 169 | 3258 |
| 3259 | Same as preceding, except was not completely settled. | 6.20 | 8.50 | 29.40 | 3.65 | 45.90 | 6.35 | 9.1 | 31.3 | 3.9 | 48.9 | 6.8 | do | 3259 |
| 3260 | Sediment from the liquid drawn off from the preceding. | 87.00 | 1.32 | 4.37 | 0.08 | 5.73 | 1.50 | 10.1 | 33.6 | 0.7 | 44.1 | 11.5 | do | 3260 |
| 3261 | Distillery slops | 93.70 | 0.19 | 1.85 | 0.58 | 2.82 | 0.86 | 3.0 | 29.6 | 9.3 | 44.6 | 13.5 | Ky. Ex. Sta. Bul. 4, p. 1 | 3261 |
| 3262 | Palmetto root *c* | 11.51 | 3.89 | 3.36 | 18.84 | 61.96 | 0.44 | 4.4 | 3.8 | 21.3 | 70.0 | 0.5 | Mass. State Ex. Sta. Rep., 1889, p. 145. | 3262 |
| 3263 | Broom-corn waste, stalks *c* | 8.70 | 4.47 | 6.21 | 35.79 | 43.92 | 0.91 | 4.9 | 6.8 | 39.2 | 48.1 | 1.0 | Mass. State Ex. Sta. Rep., 1887, p. 101. | 3263 |
| 3264 | Refuse meat, cooked and packed in barrels, used for poultry food. | 55.44 | 2.20 | 35.36 | ..... | 1.34 | 5.66 | 4.9 | 79.3 | ..... | 3.0 | 12.8 | Conn. State Ex. Sta. Rep., 1888, p. 154 | 3264 |
| 3265 | Beef scrap | 1.33 | 8.03 | 57.69 | ..... | ..... | 32.95 | 8.1 | 58.5 | ..... | ..... | 33.4 | Me. Ex. Sta. Rep., 1886–'87, p. 68 | 3265 |
| 3266 | Pork scrap | 0.81 | 2.24 | 57.35 | ..... | ..... | 39.60 | 2.2 | 57.8 | ..... | ..... | 40.0 | do | 3266 |
| 3267 | Dried blood | 6.69 | 6.64 | 65.12 | ..... | 5.32 | 16.23 | 7.1 | 69.8 | ..... | 5.7 | 17.4 | do | 3267 |

* Adds 99.

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